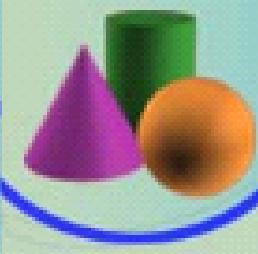


第一章	<u>制图的基本知识</u>
第二章	<u>点、直线和平面的投影</u>
第三章	<u>立体</u>
第四章	<u>平面与曲面立体相交、两曲面立体相交</u>
第五章	<u>轴测图</u>
第六章	<u>组合体</u>
第七章	<u>机件的表达方法</u>
第八章	<u>标准件与常用件</u>
第九章	<u>零件图</u>



习题 1-6

习题 1-7

习题 1-8

习题 1-9

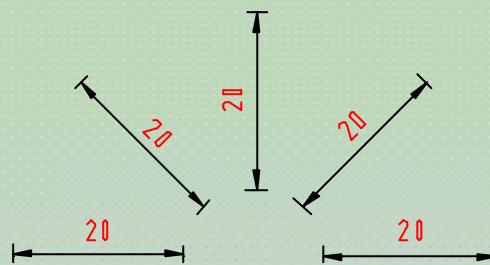
习题 1-10

习题 1-11

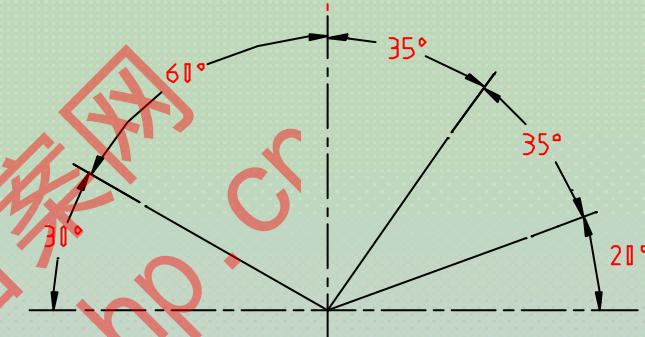
返回

1-6 尺寸注法。

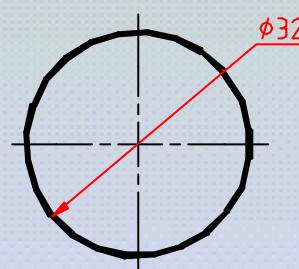
(1) 注出各方向的尺寸



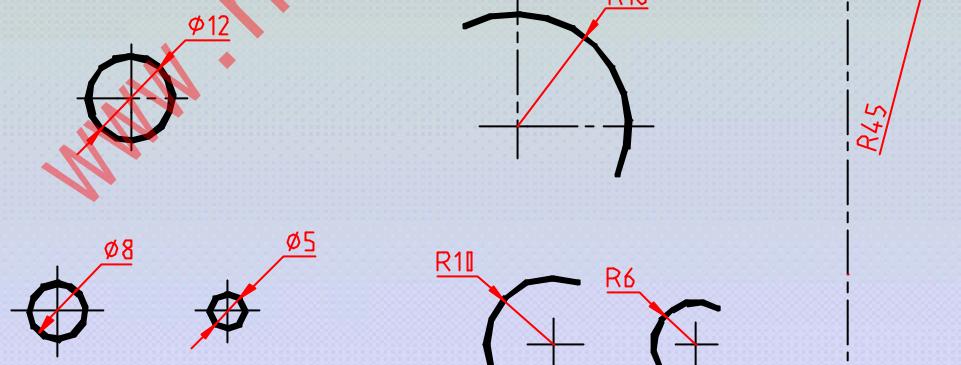
(2) 注出角度



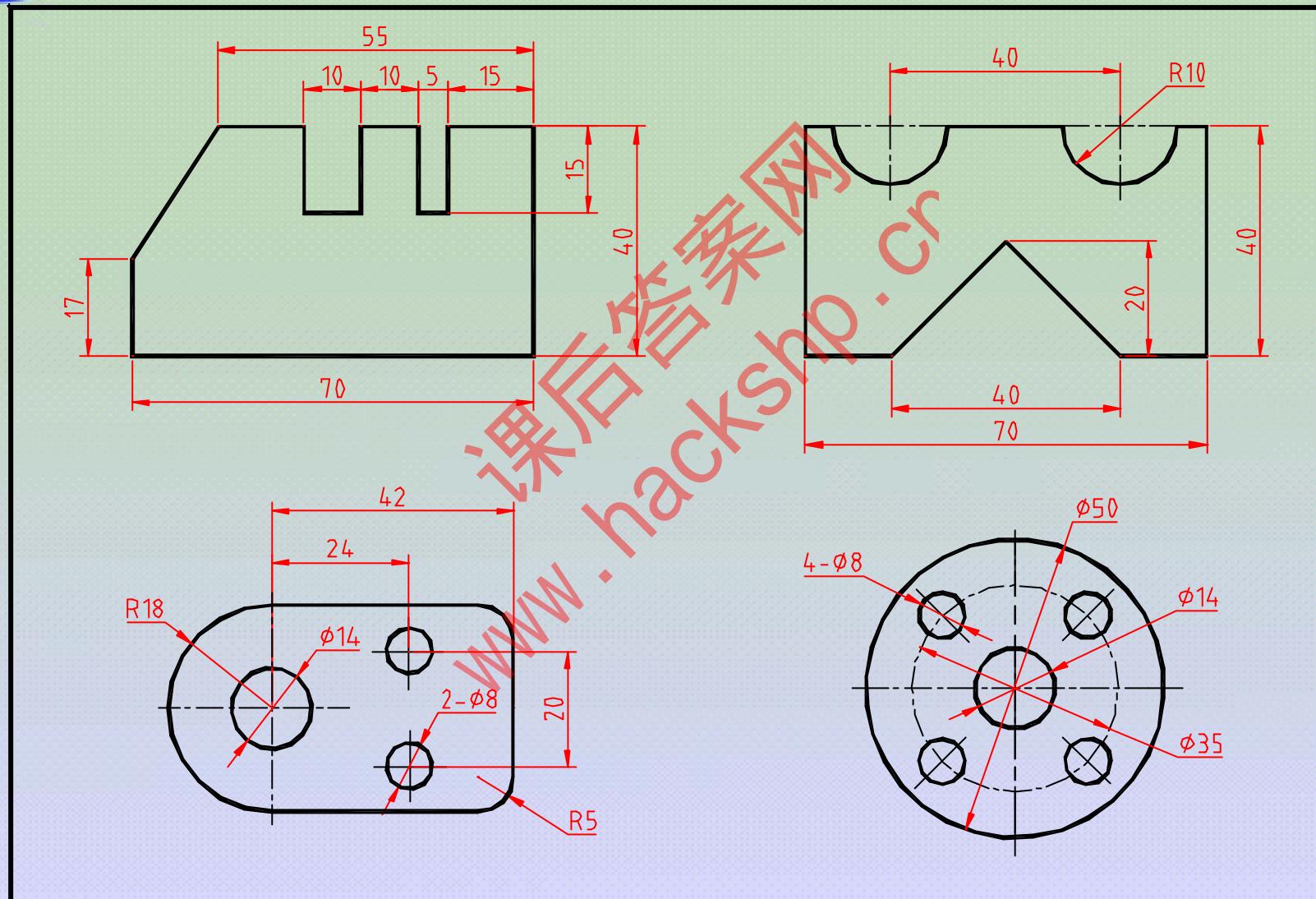
(3) 注出直径



(4) 注出半径

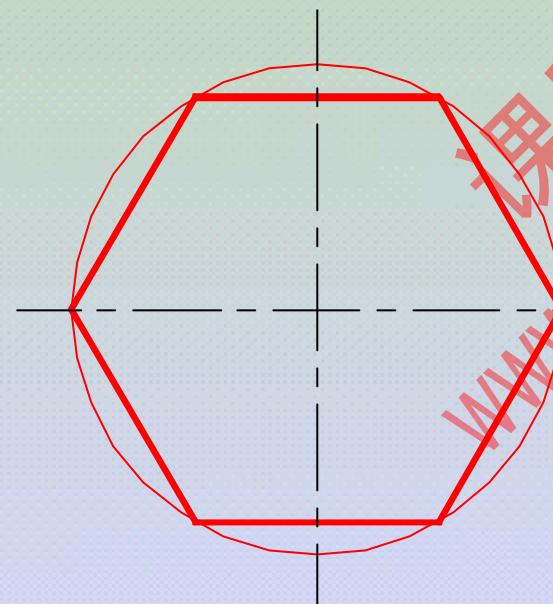
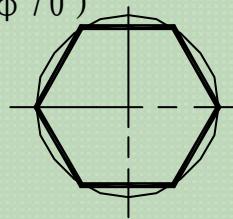


1-7 尺寸注法（按1: 1测量取整数）。

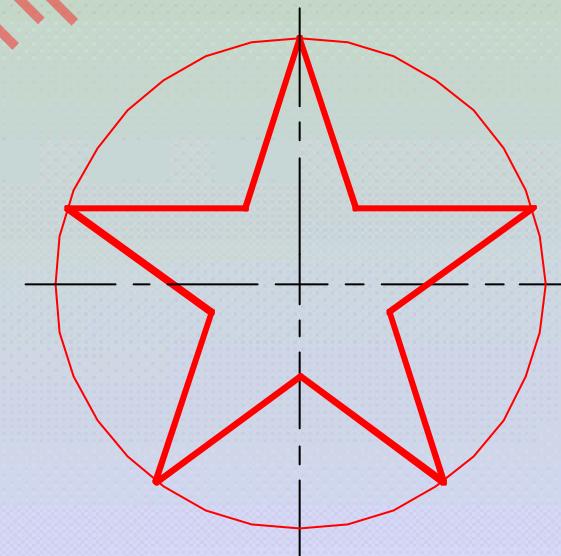


1-8 几何作图

(1) 作正六边形 (外接圆 $\phi 70$)



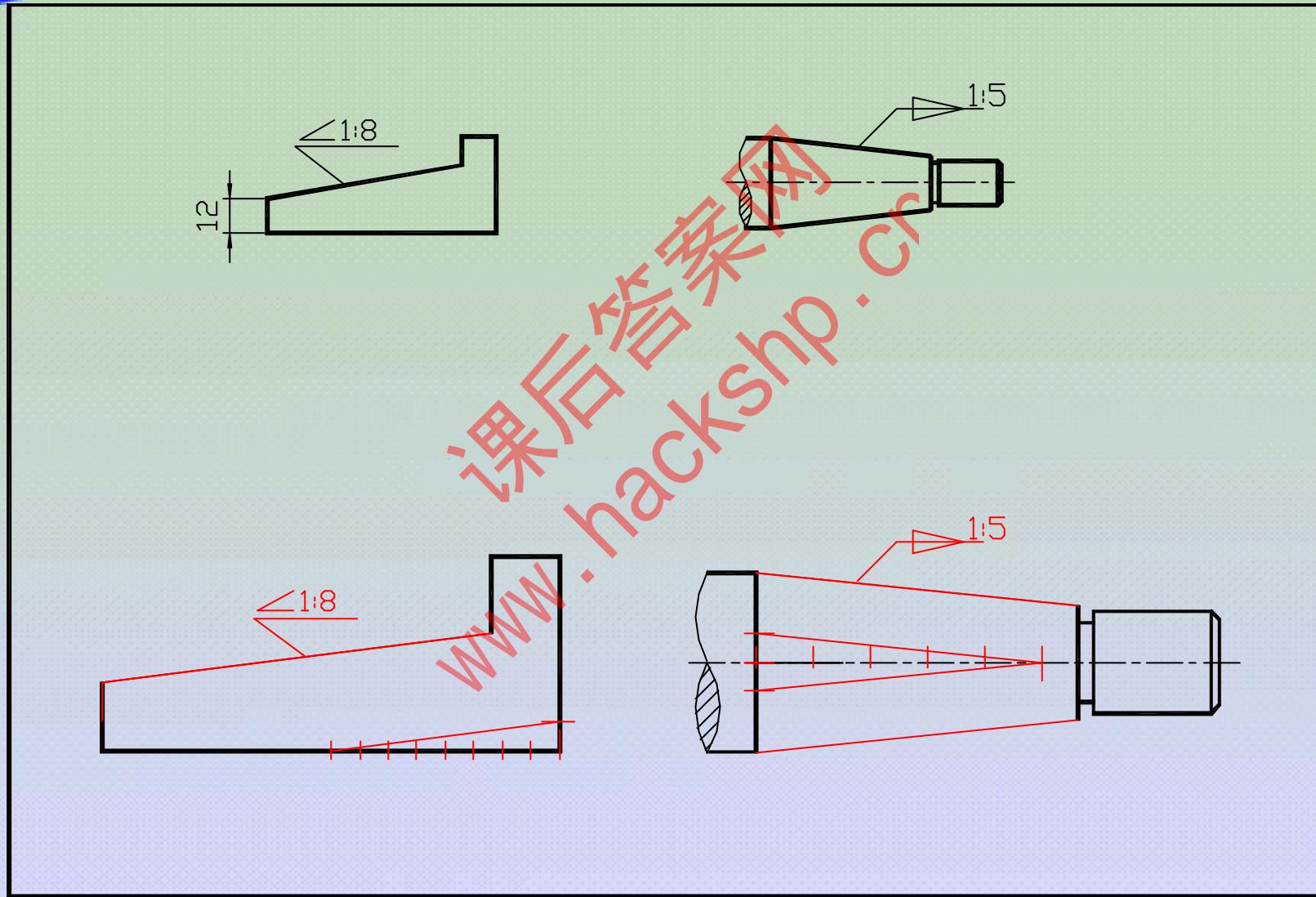
(2) 作五角星 (外接圆 $\phi 60$)



课后答案网
www.hackshp.cn

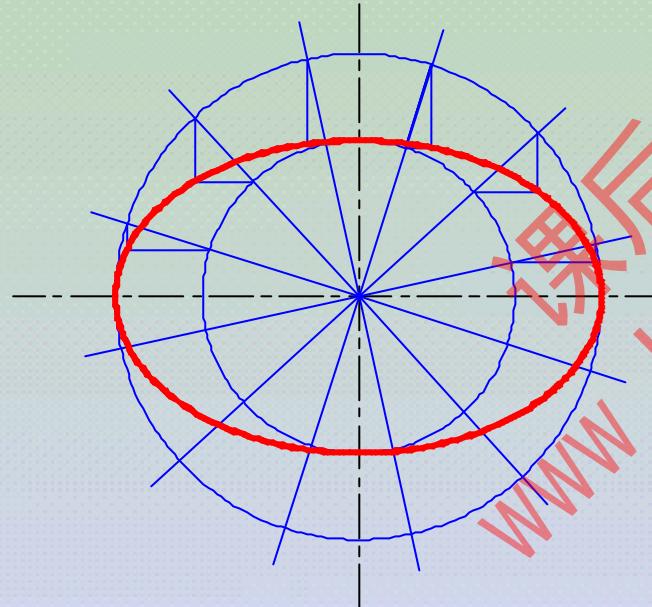


1-9 几何作图 作带斜度和锥度的图形，并标注

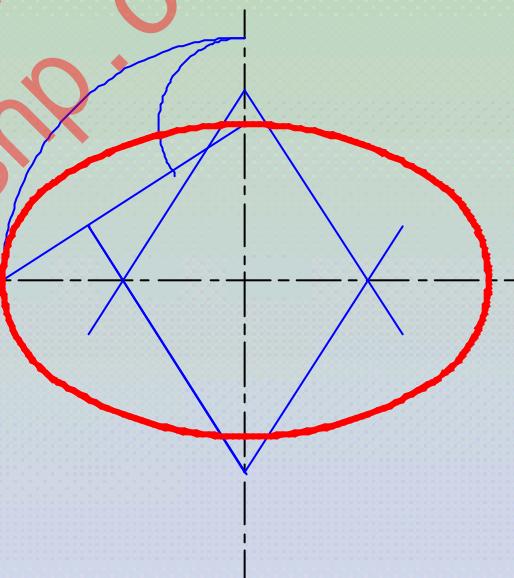


1-10 已知椭圆长轴为70, 短轴为45, 作椭圆

(1) 同心圆法



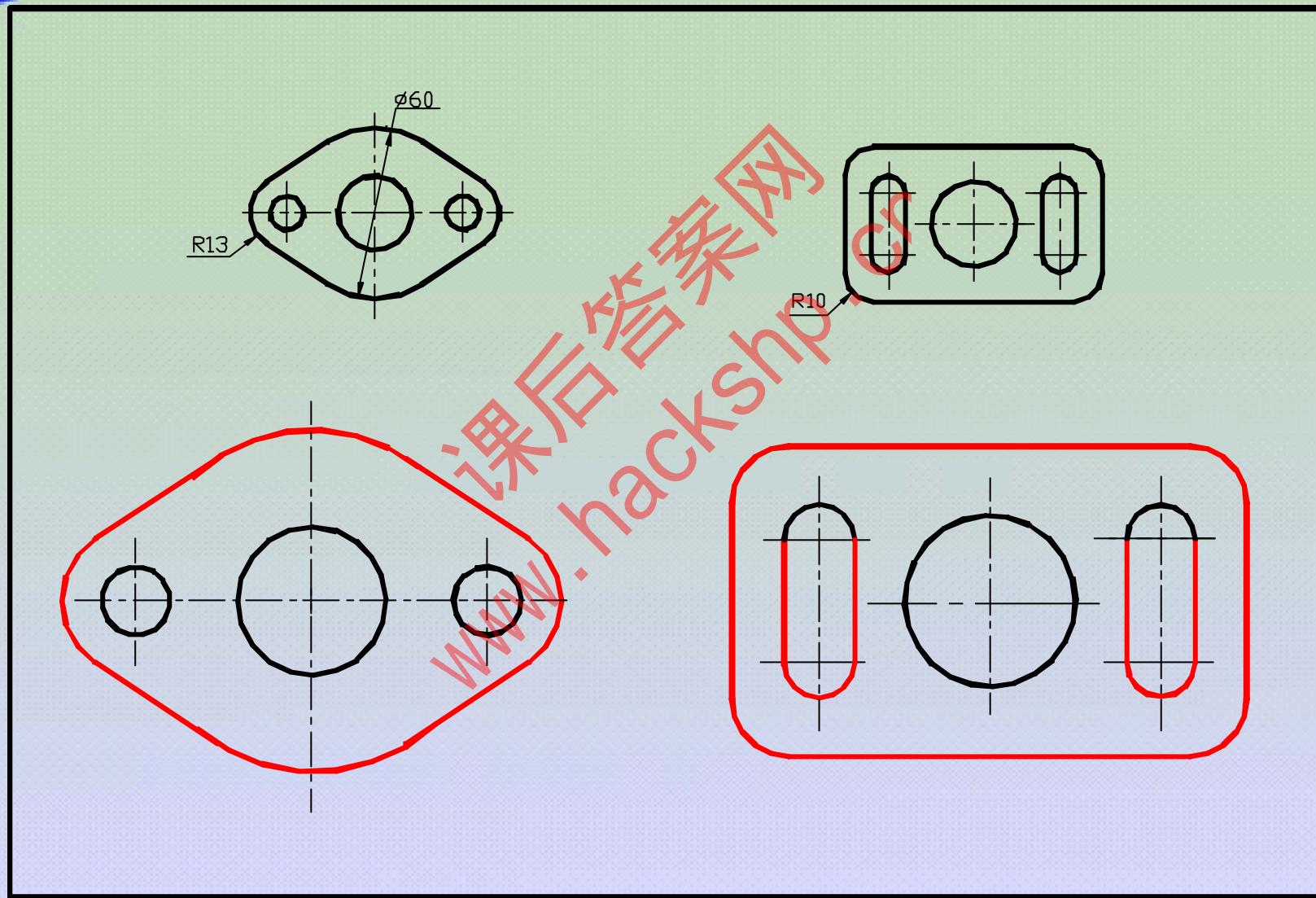
(2) 四心圆弧法



课后答案网
www.hackshop.cn



1-11 按给出的图形及尺寸，完成下面的作图



习题 2-1

习题 2-4

习题 2-7

习题 2-10

习题 2-13

习题 2-16

习题 2-19

习题 2-2

习题 2-5

习题 2-8

习题 2-11

习题 2-14

习题 2-17

习题 2-20

习题 2-3

习题 2-6

习题 2-9

习题 2-12

习题 2-15

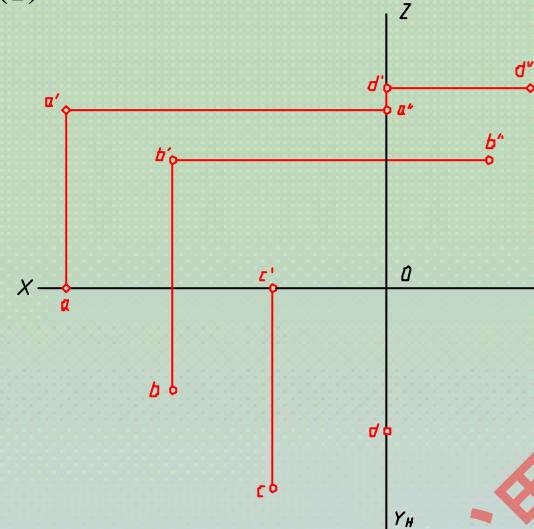
习题 2-18

返
回

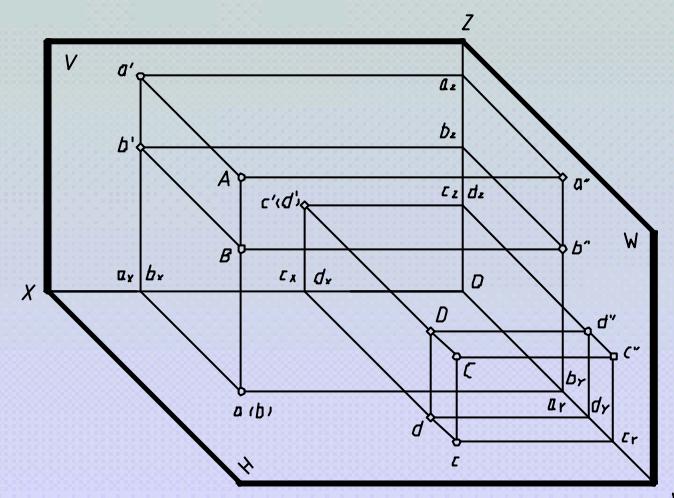
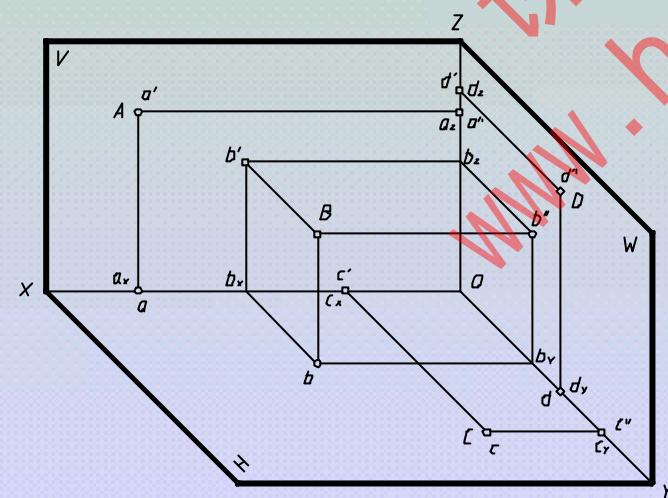
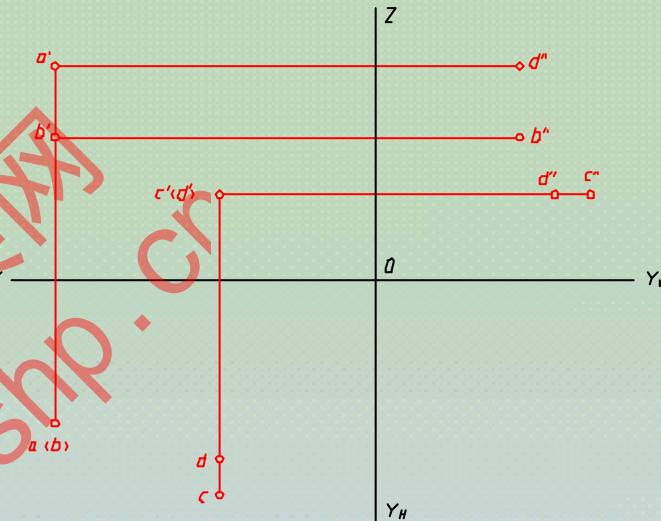
第二章 点、直线和平面的投影

2-1 根据立体图画点的投影图（按1: 1量取）

(1)



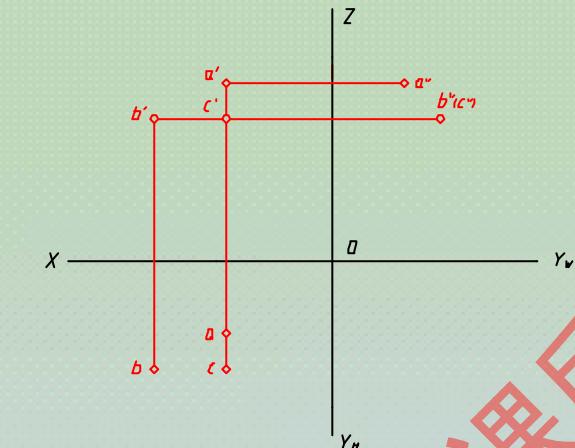
(2)



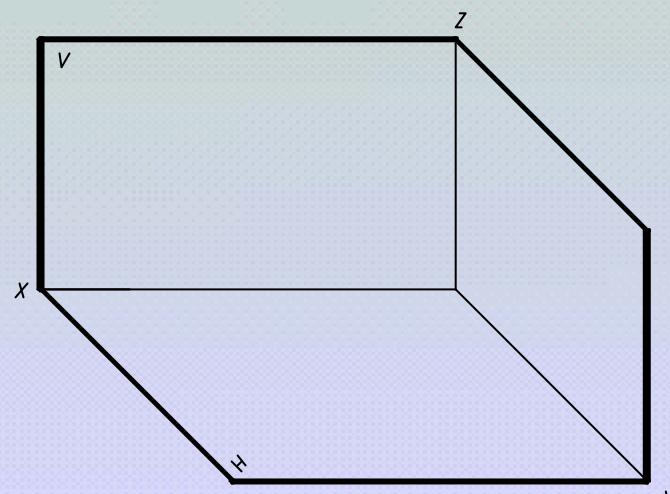
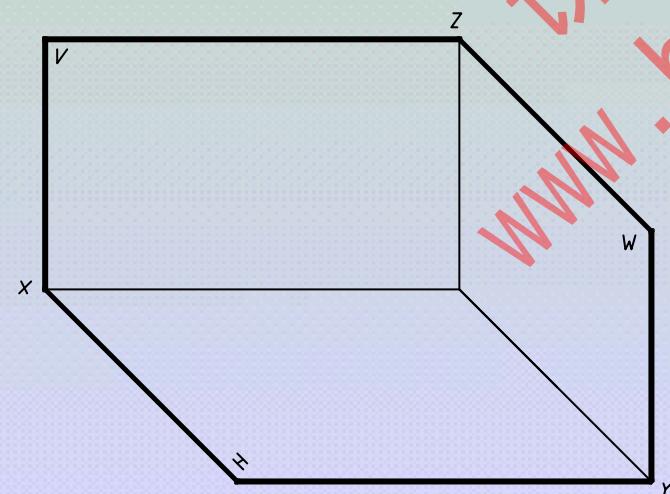
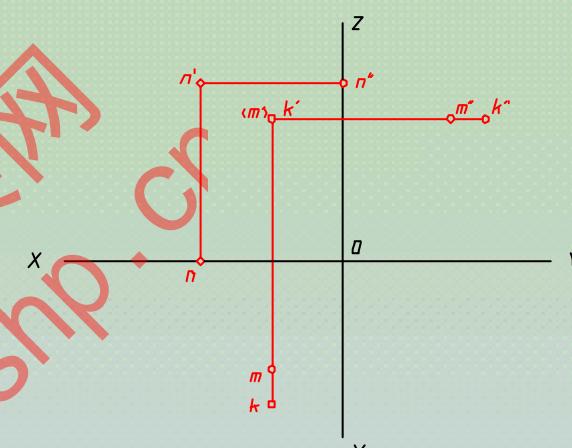
第二章 点、直线和平面的投影

2-2 根据点的坐标画出其投影图和立体图

(1) A (15, 10, 25) , B (25, 15, 20) , (15, 15, 20)



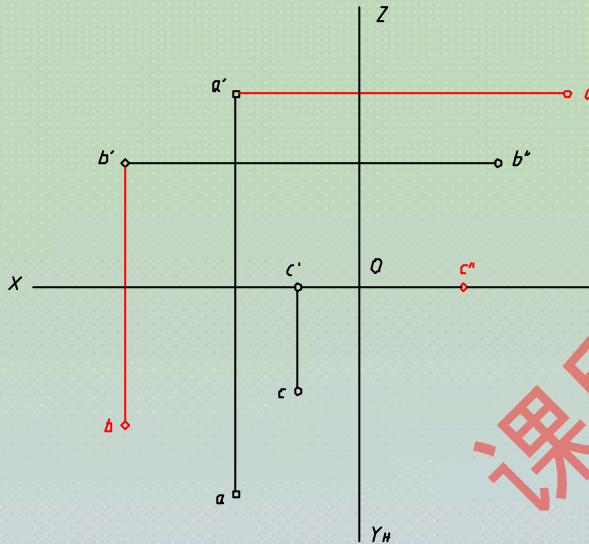
(2) M (10, 15, 20) , (20, 0, 25), (10, 20, 20)



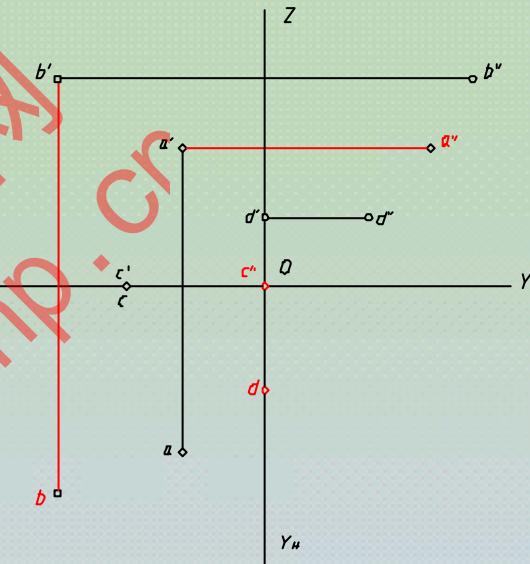
第二章 点、直线和平面的投影

2-3 根据点的两面投影作第三面投影，并比较各点的相对位置

(1)



(2)



B、C和A比较	B	C
在A点的上下	下	下
在A点的前后	后	后
在A点的左右	左	右

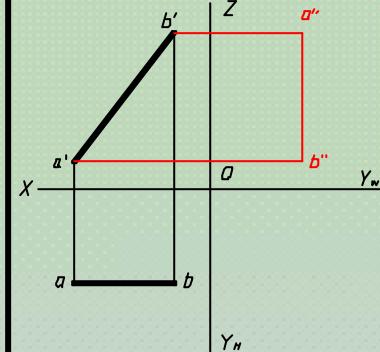
B、C、D和A比较	B	C	D
在A点的上下	上	下	下
在A点的前后	前	后	后
在A点的左右	左	左	右



第二章 点、直线和平面的投影

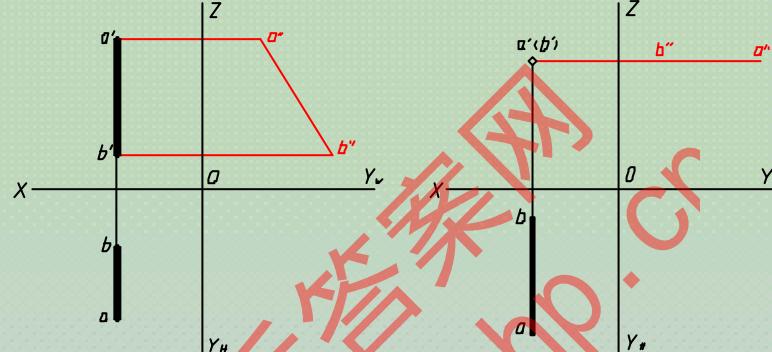
2-4 补画出直线的第三投影，并判断是什么位置直线

(1)



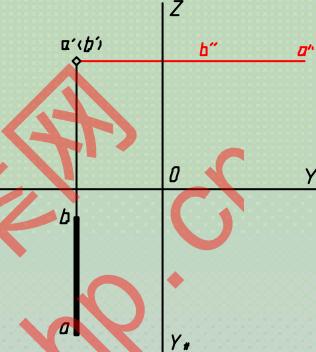
正垂线

(2)



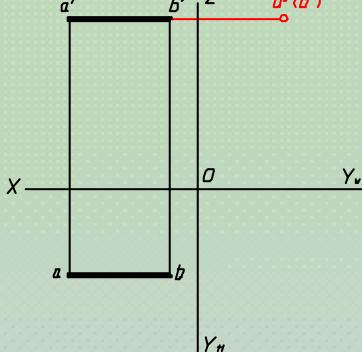
侧平线

(3)



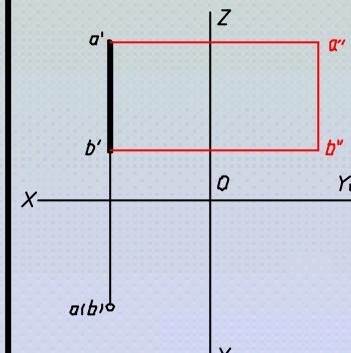
正平线

(4)



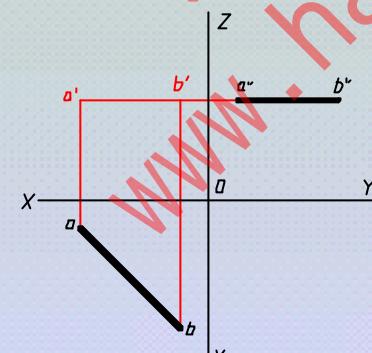
侧垂线

(5)



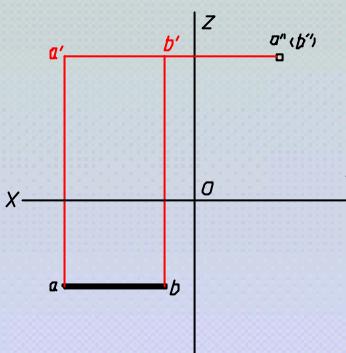
铅垂线

(6)



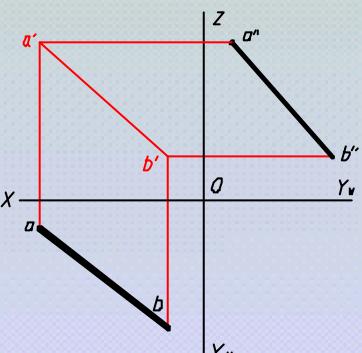
水平线

(7)



侧垂线

(8)

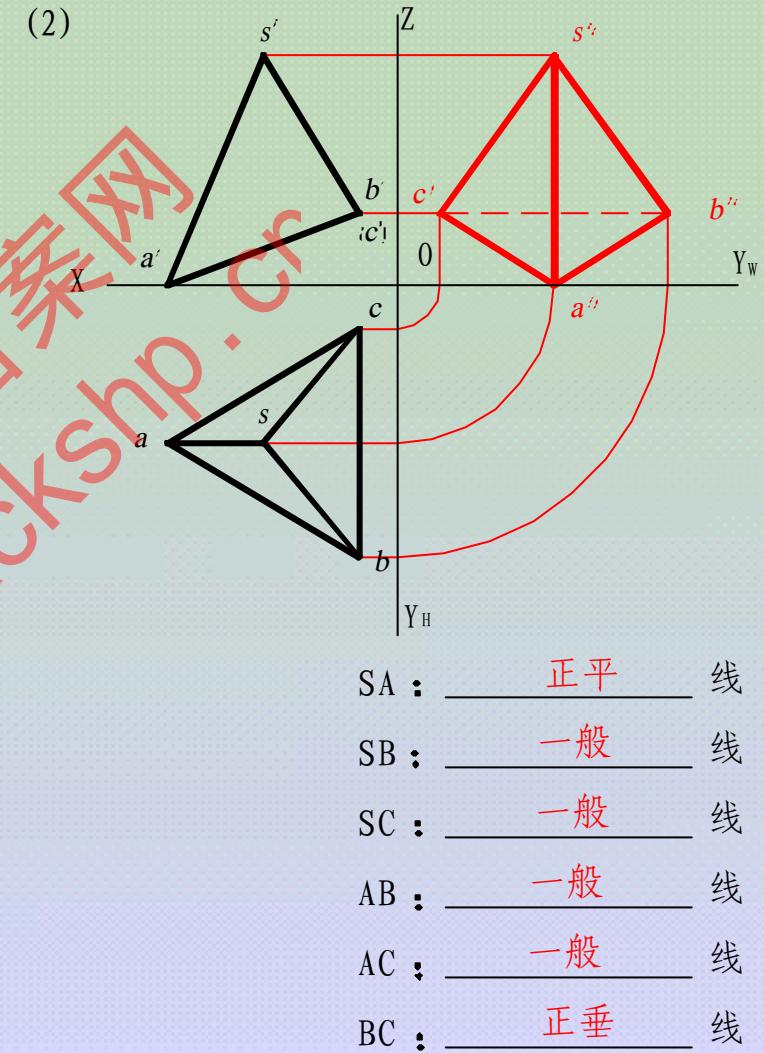
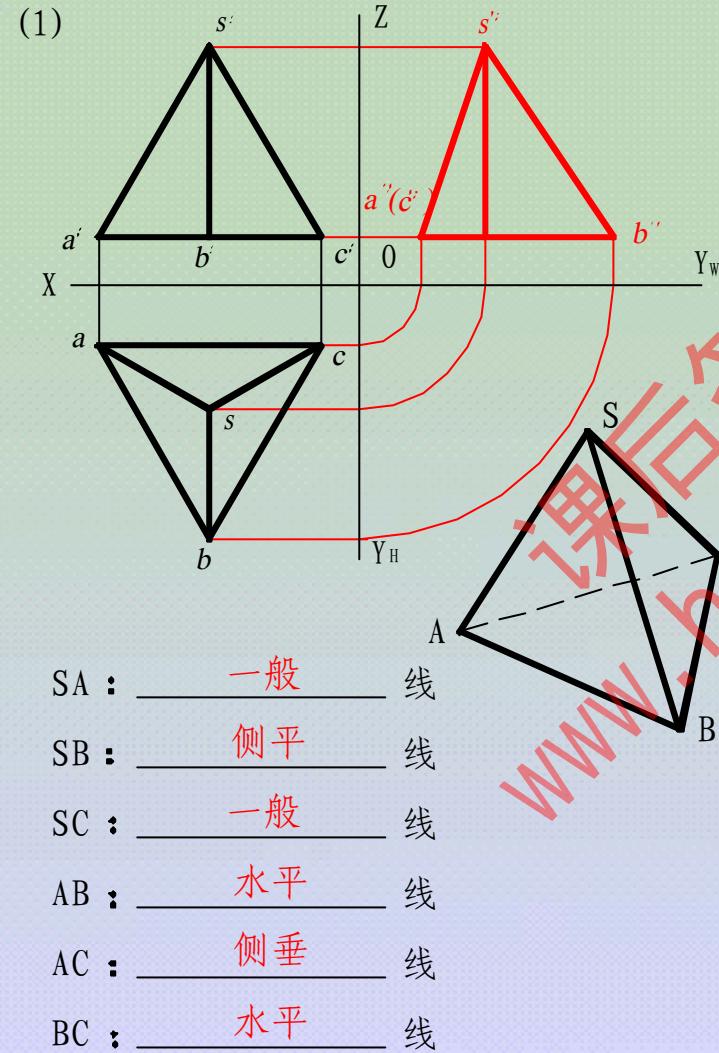


一般位置线



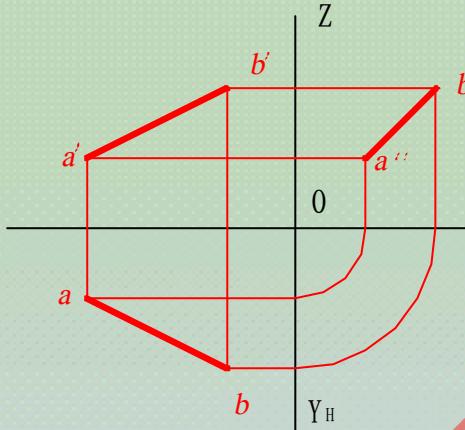
第二章 点、直线和平面的投影

2-5 补画出三棱锥的侧面投影，并判断各棱线是什么位置直线

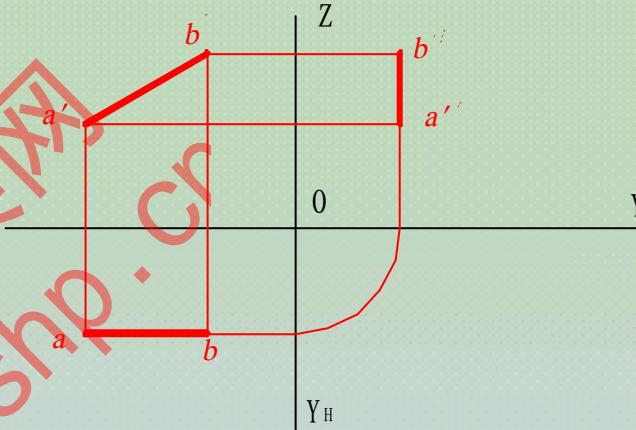


2-6 根据所给的条件作出直线的三面投影

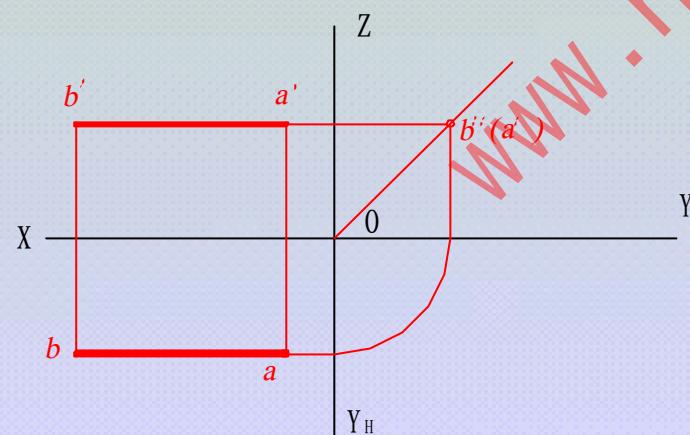
(1) 已知线段点A (30, 10, 10) , 点B (10, 20, 25) 。



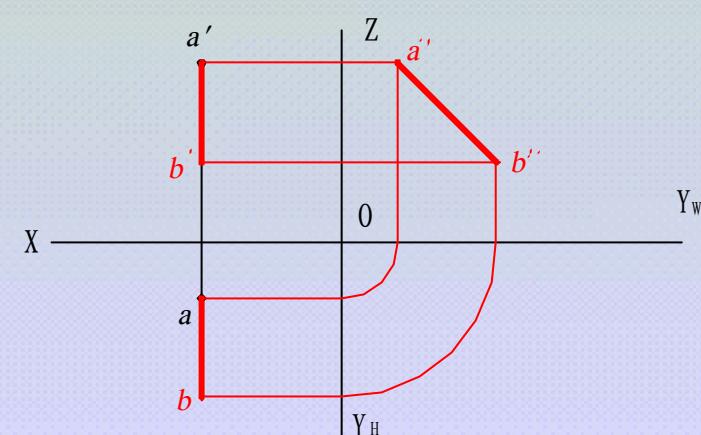
(2) 点A (30, 15, 10) 和线段AB的实长30, $\alpha=30$ 的正平线



(3) 过点A, 作一侧垂线AB, 长为30且与H, V面等距。



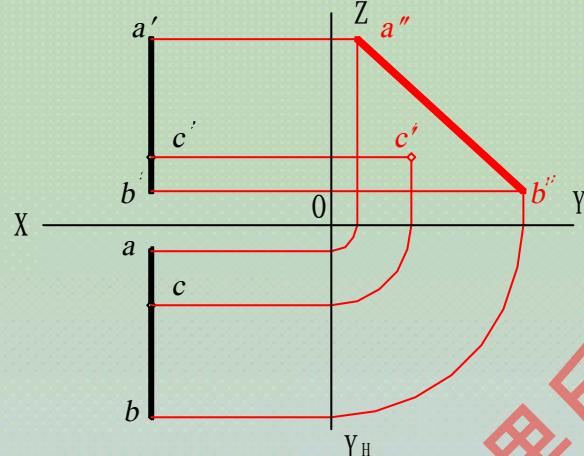
(4) 作侧平线AB, 长为20, 与V, H面倾角相等。



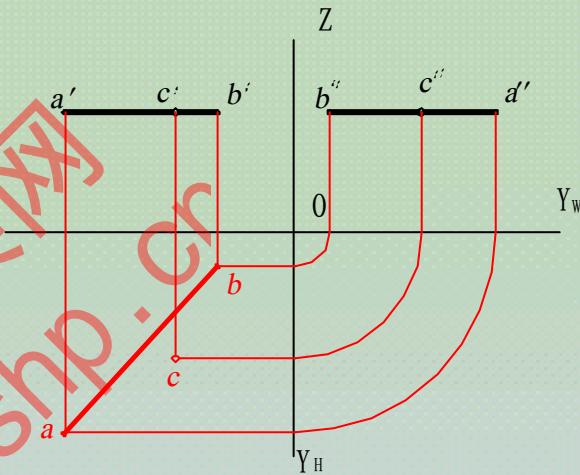
第二章 点、直线和平面

2-7 判断点C是否属于直线AB，在括号内填写“是”或“否”

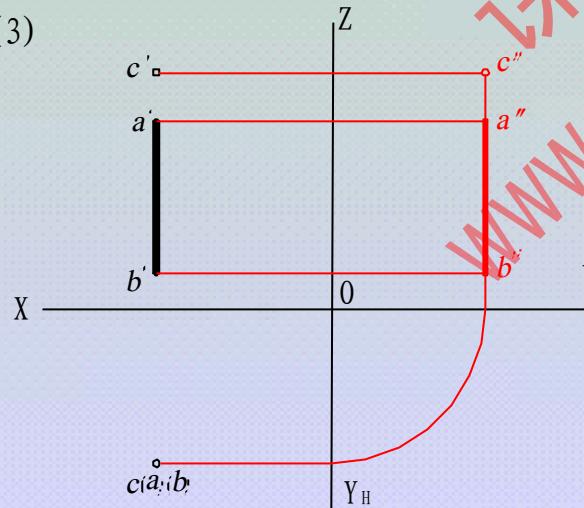
(1)



(2)

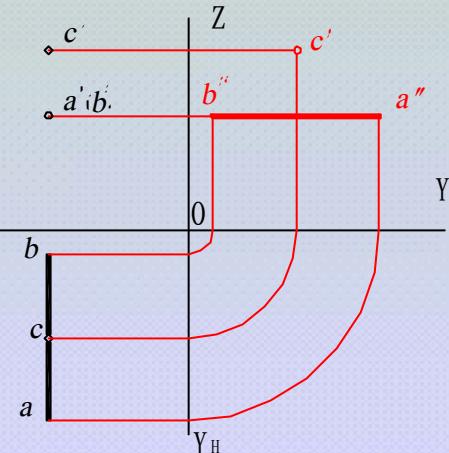


(3)



(是)

(4)

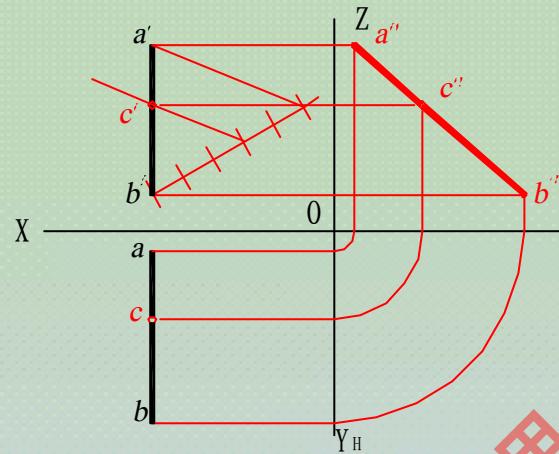


(否)

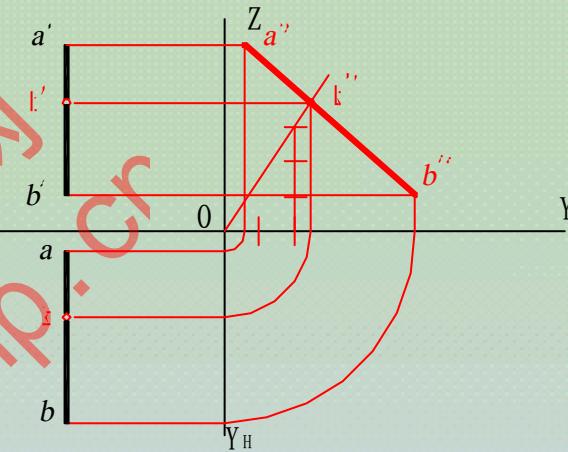


2-8 根据条件，在线段上求点

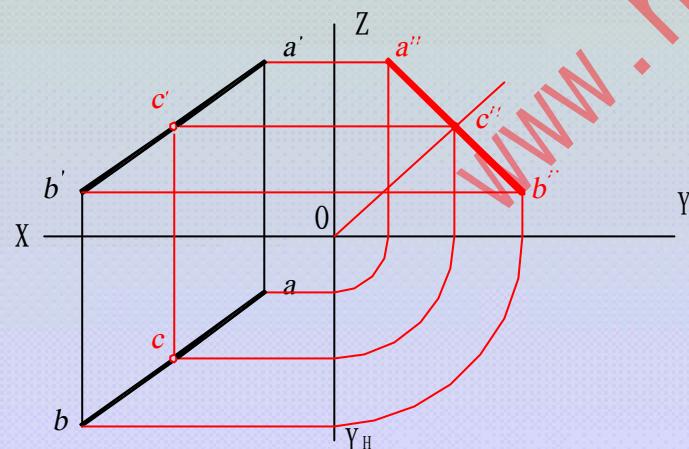
(1) 确定点C使AC: CB=2: 3



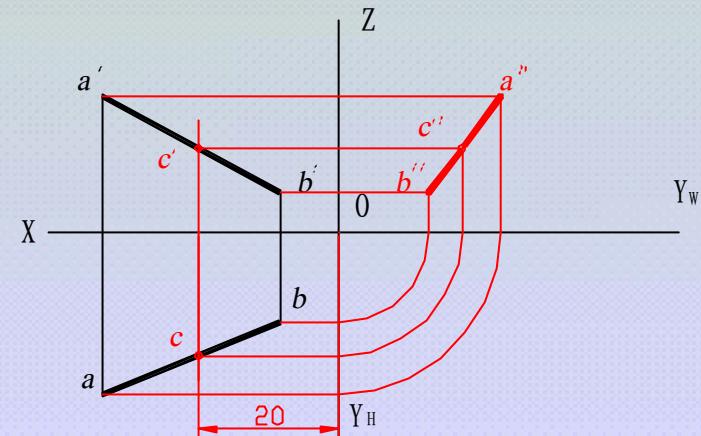
(2) 确定点K使点K到V与H面距离之比为2: 3。



(3) 确定点C 使其与V、H面等距。

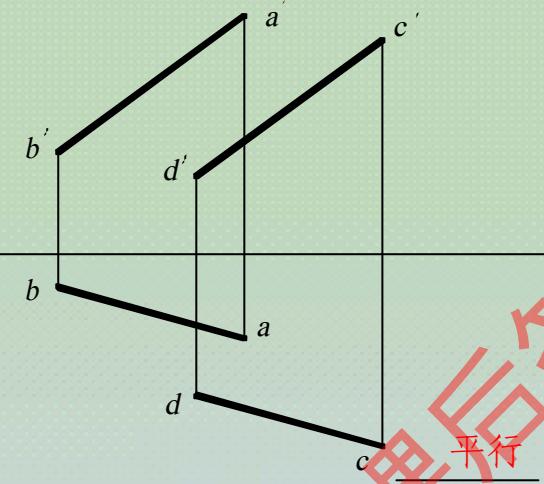


(4) 确定点C 使其距W面为20。

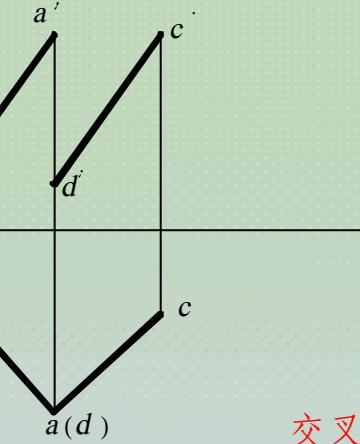


2-9 判断两直线的相对位置（用文字说明），(3) (4) 要作出第三投影。

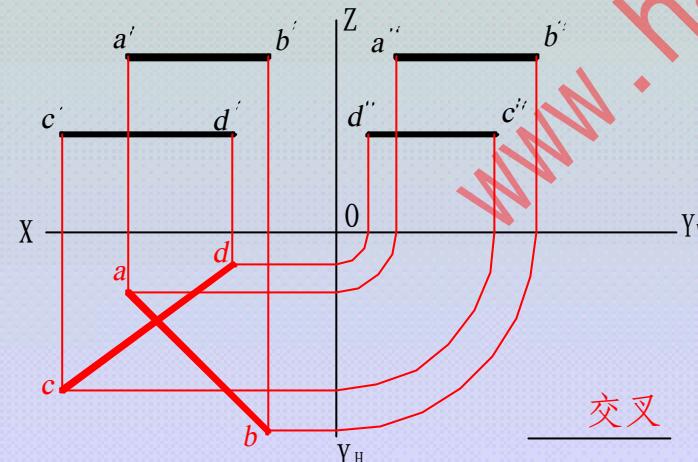
(1)



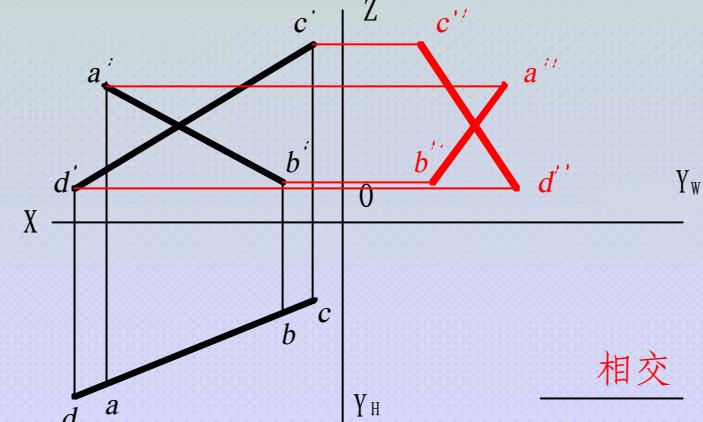
(2)



(3)

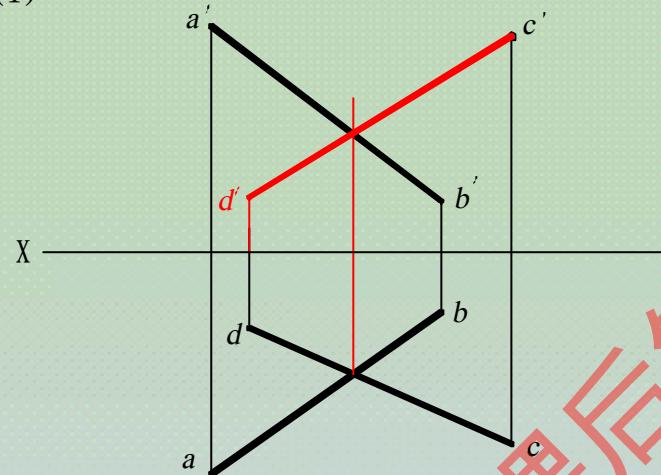


(4)

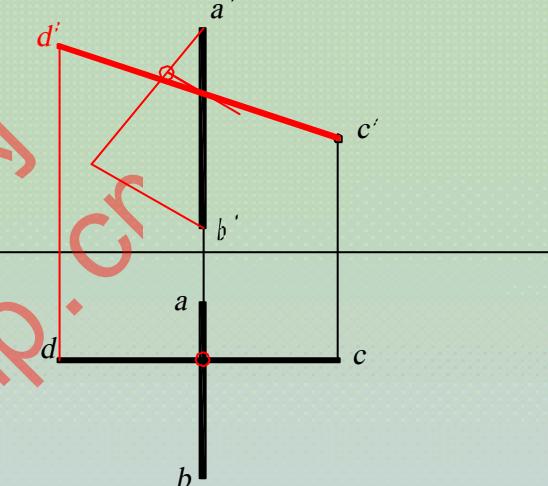


2-10 两直线相交，完成其投影。

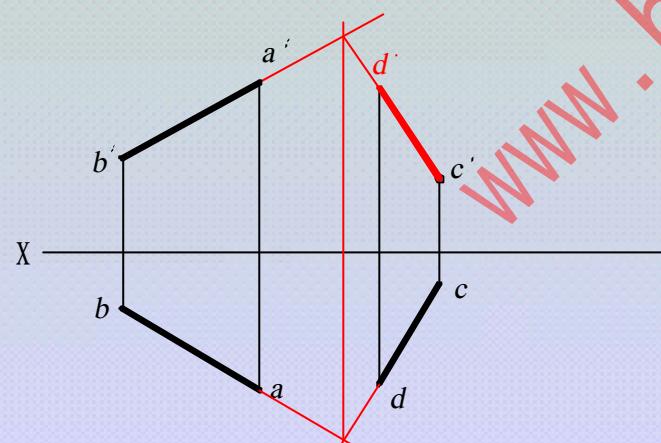
(1)



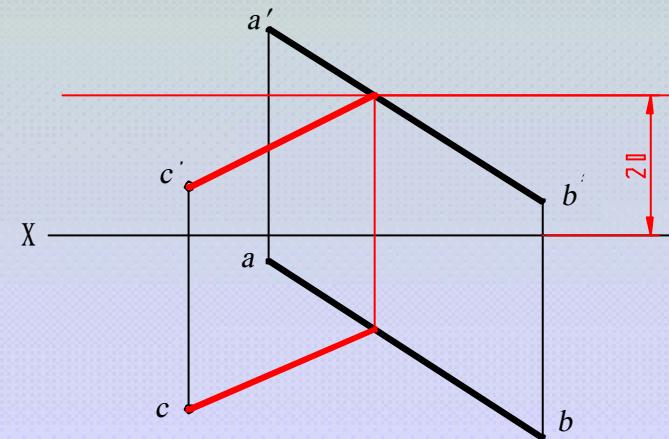
(2)



(3)

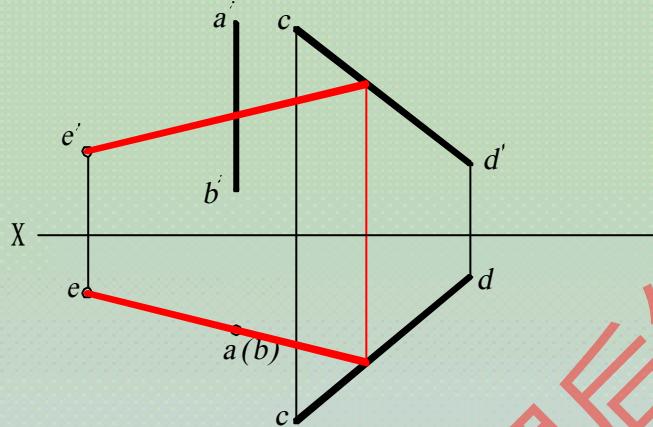


(4) 交点距H面为20

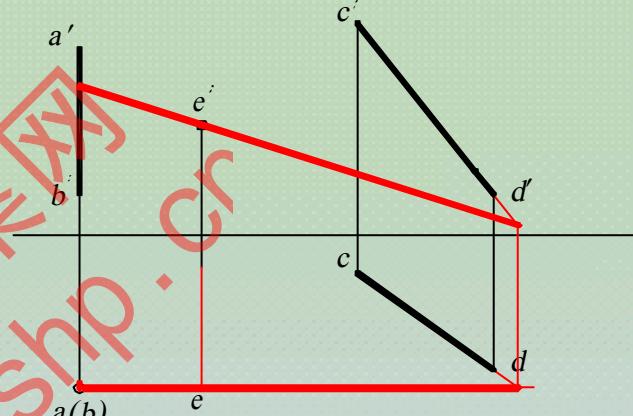


2-11 根据要求作出直线

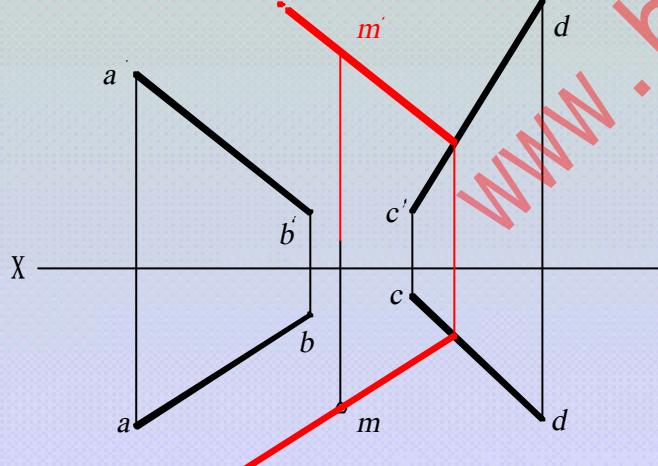
(1) 过点E作直线与AB、CD都相交。



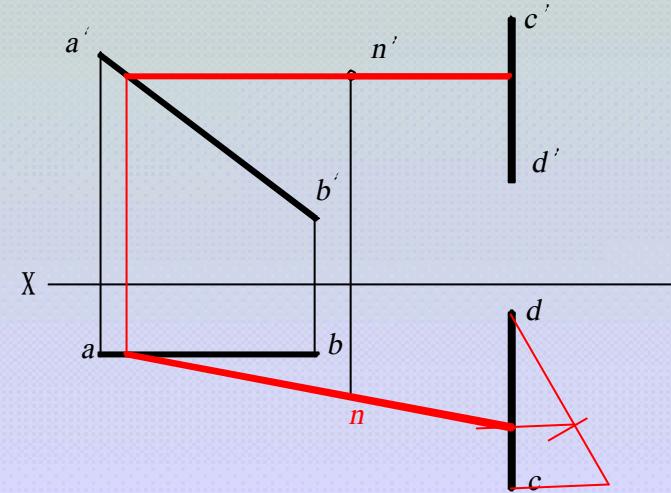
(2) 过点E作一正平线与AB、CD都相交。



(3) 过点M作直线与AB平行且与CD相交。

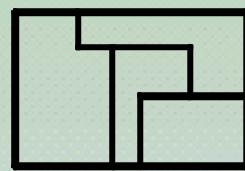
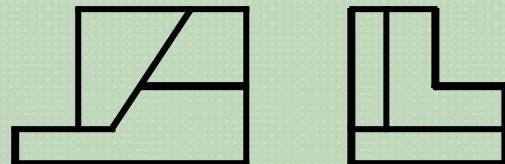


(4) 过点N作水平线与AB、CD都相交。

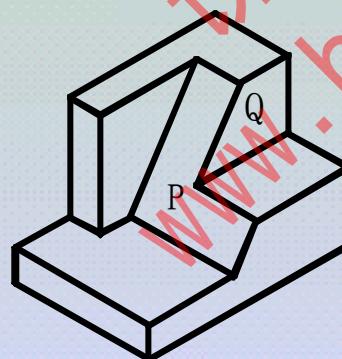


2-12 判别给出的平面与投影面的相对位置

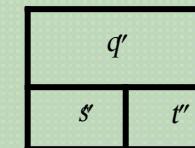
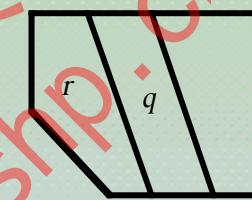
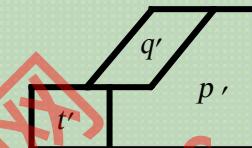
(1)



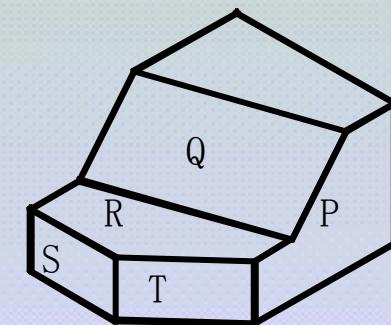
P面 正垂面
Q面 正平面



(2)



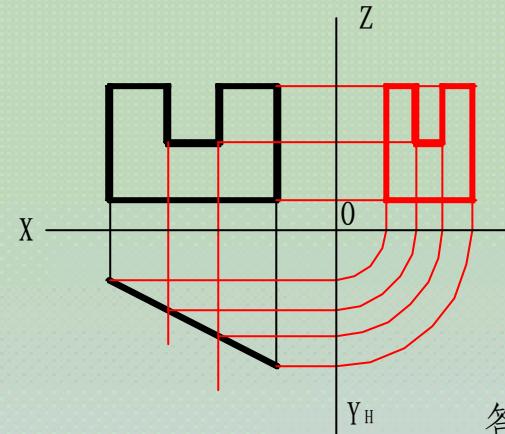
P面 正平面
Q面 一般位置面
R面 水平面
S面 侧平面
T面 铅垂面



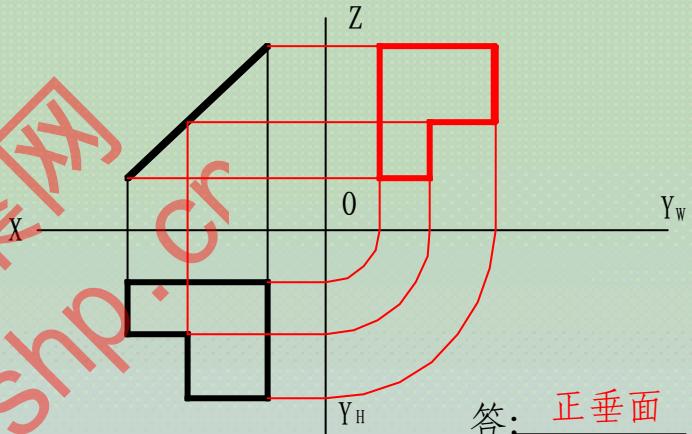
第二章 点、直线和平面

2-13 完成平面图形的第三投影，并判断属于何种位置平面

(1)



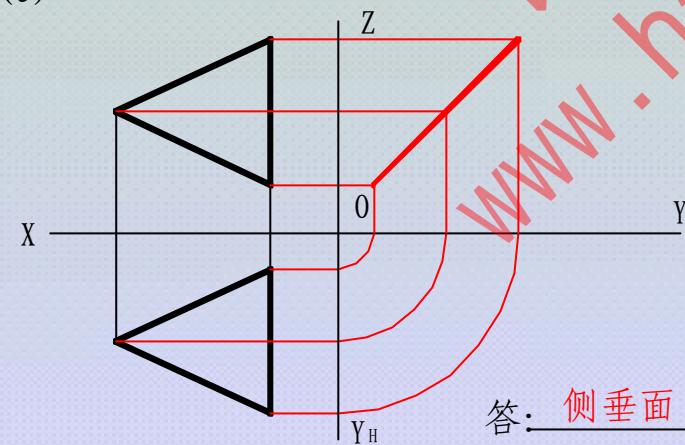
(2)



答: 铅垂面

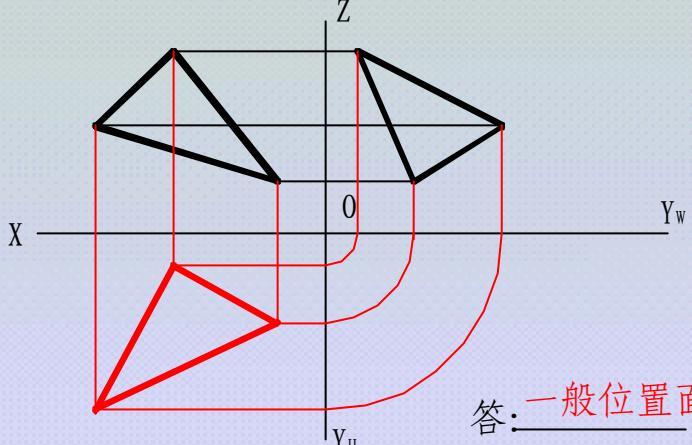
答: 正垂面

(3)



答: 侧垂面

(4)

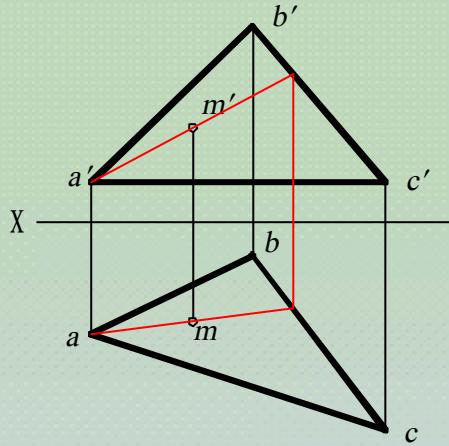


答: 一般位置面



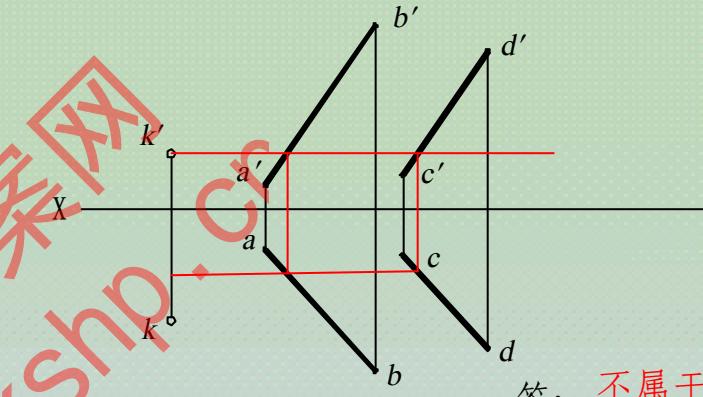
2-14 判断点是否属于平面

(1) 点M是否属于平面 $\triangle ABC$?



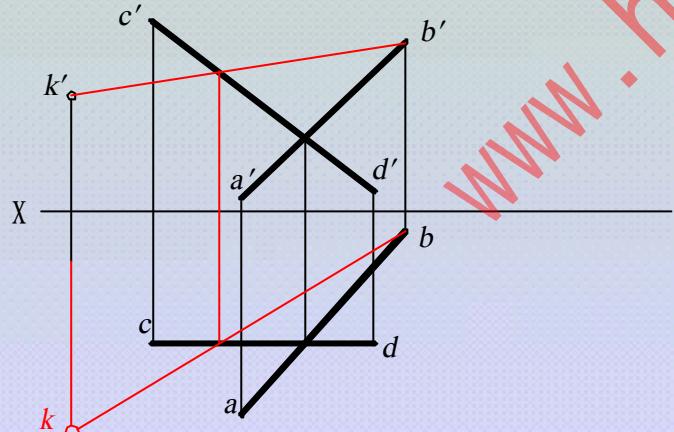
答: 属于

(2) 点K是否从属于二平行线所确定的平面?

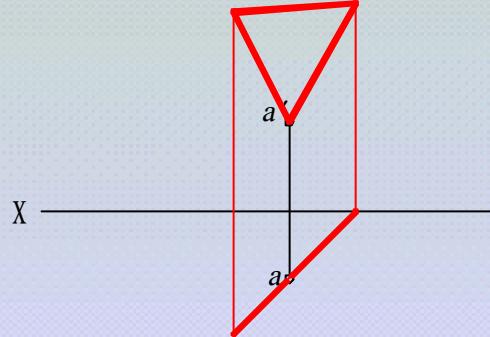


答: 不属于

(3) 点K从属于相交二直线决定的平面,求其水平投影。

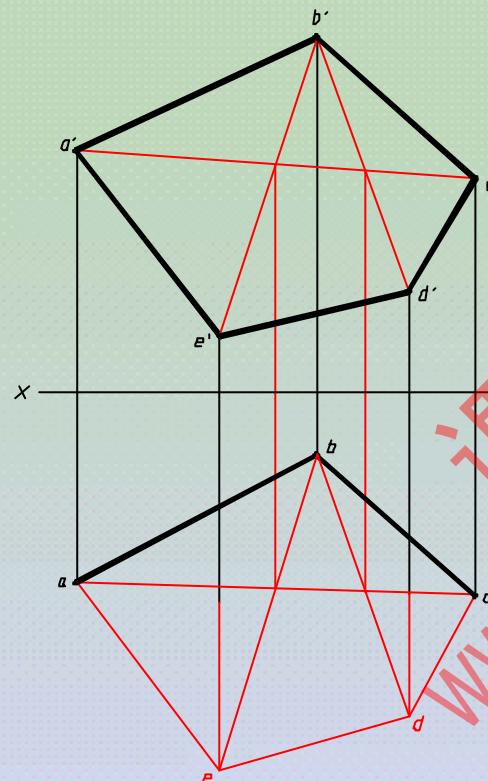


(4) 过点A作铅垂面与V面倾角为45°。

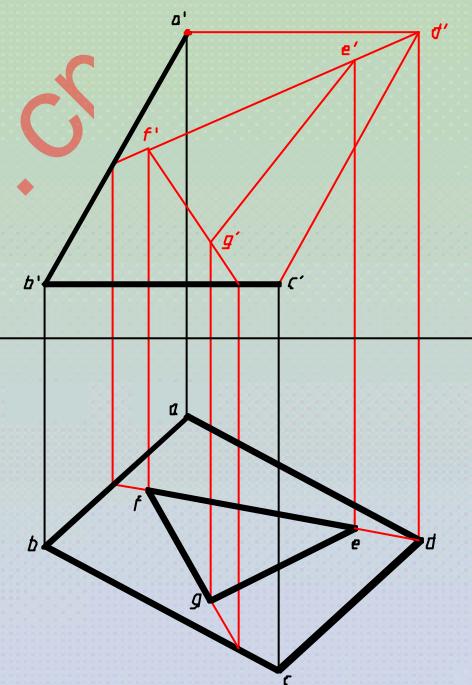


2-15 补全平面图形所缺的投影

(1)

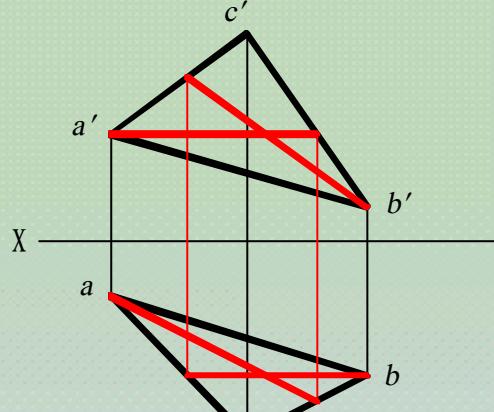


(2)

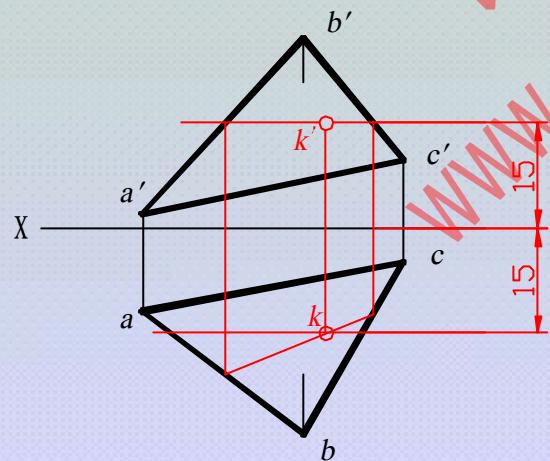


2-16 平面内作线

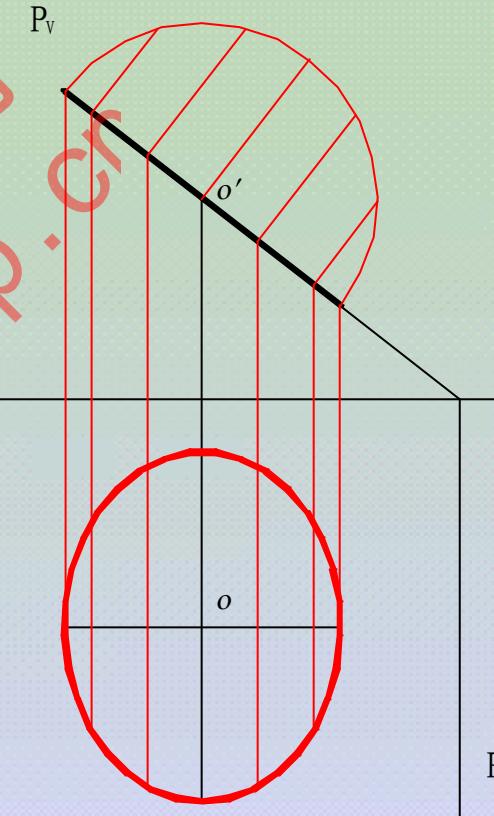
(1) 在平面内过点A作水平线, 过点B作正平线。



(2) 在平面内确定点K, 使其距V面和H面均为15毫米。

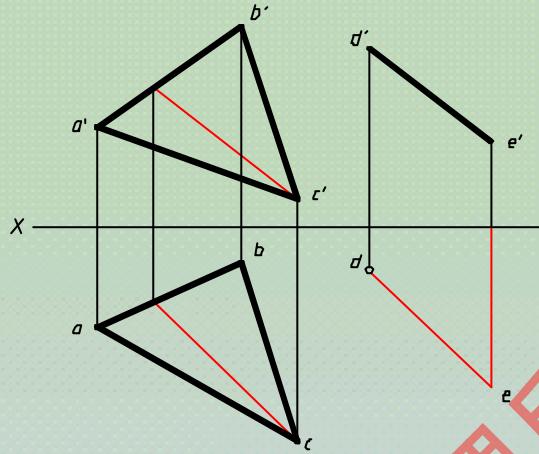


(3) 求平面P内直径为50 毫米圆 (圆心为O) 的水平投影。

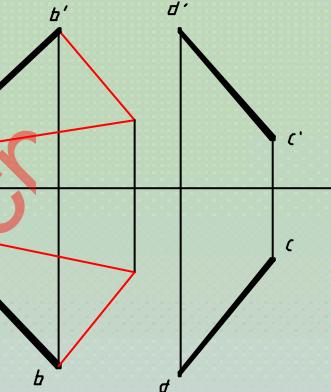


2-17 直线和平面的相对位置

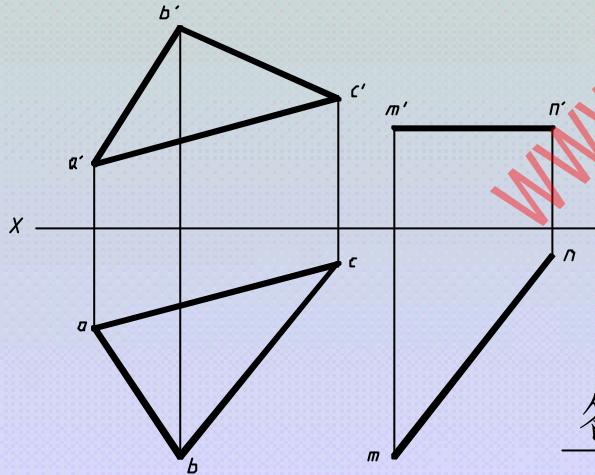
(1) 直线DE平行 $\triangle ABC$, 求其水平投影



(2) 作 $\triangle ABC$ 平行于直线DE

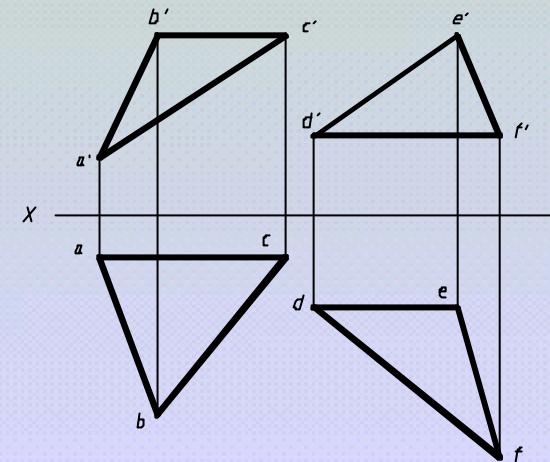


(3) 判断直线MN是否平行于 $\triangle ABC$?



答: 否

(4) 判断直线MN是否平行于 $\triangle ABC$?

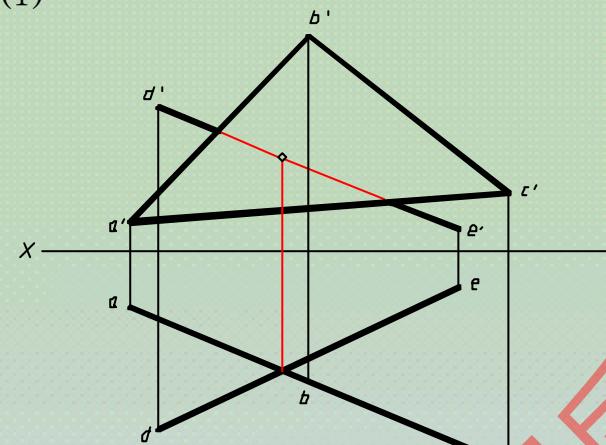


答: 否

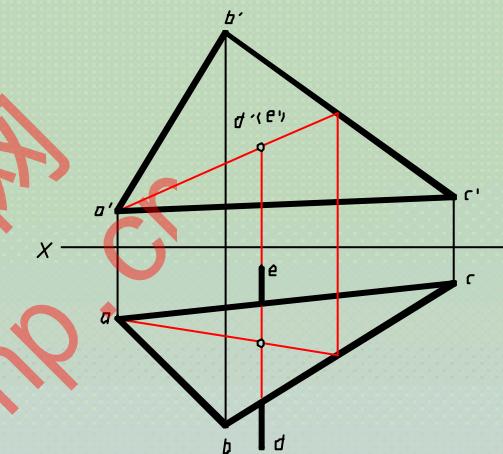


2-18 求直线与平面的交点，并判别可见性

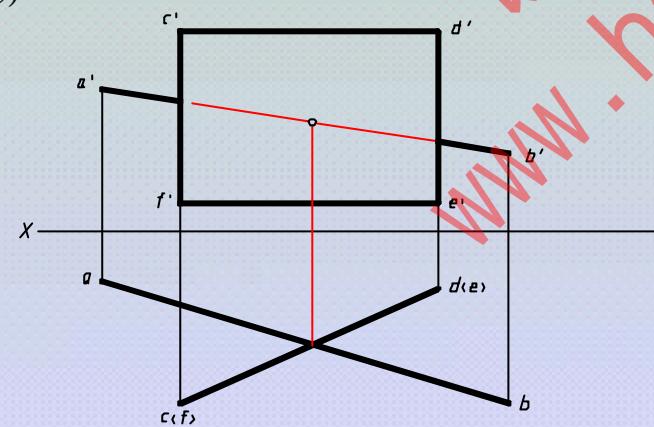
(1)



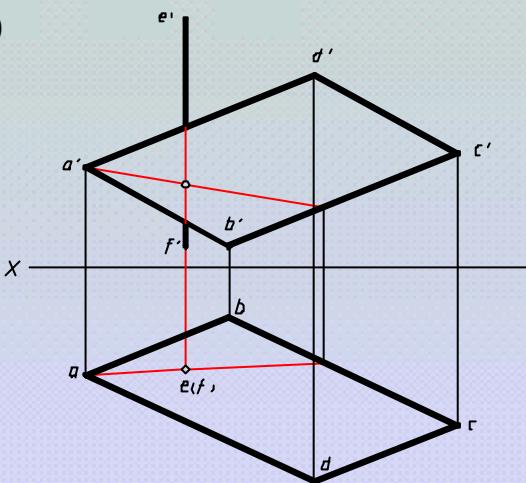
(2)



(3)



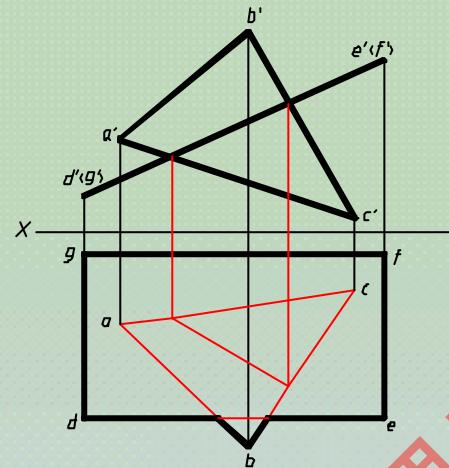
(4)



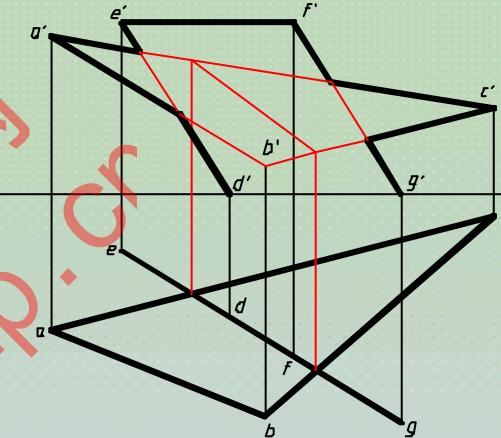
第二章 点、直线和平面

2-19 求两平面的交线，并判别可见性

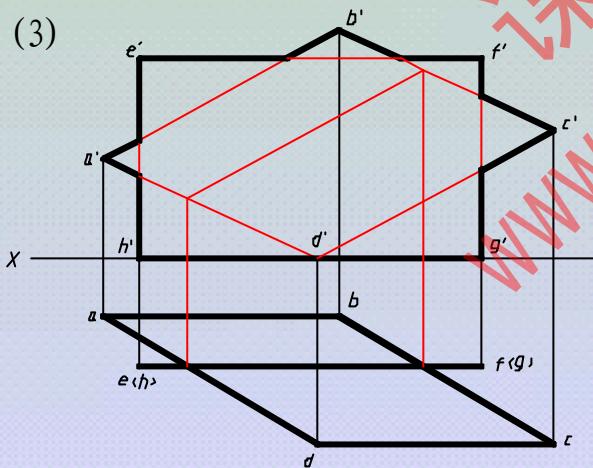
(1)



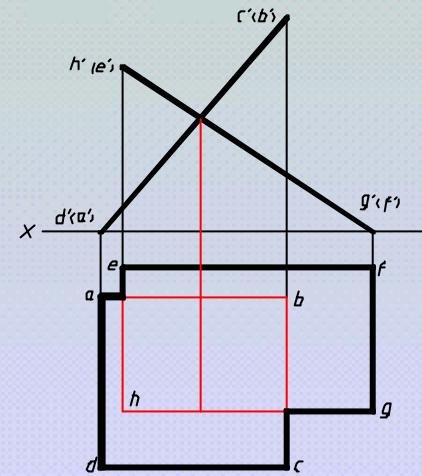
(2)



(3)

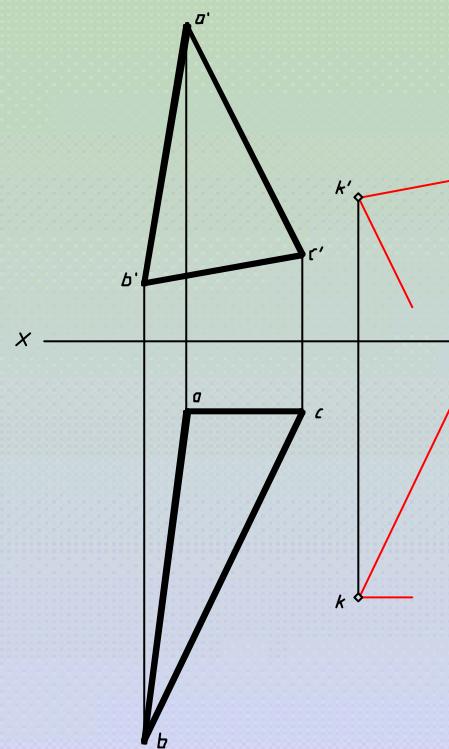


(4)

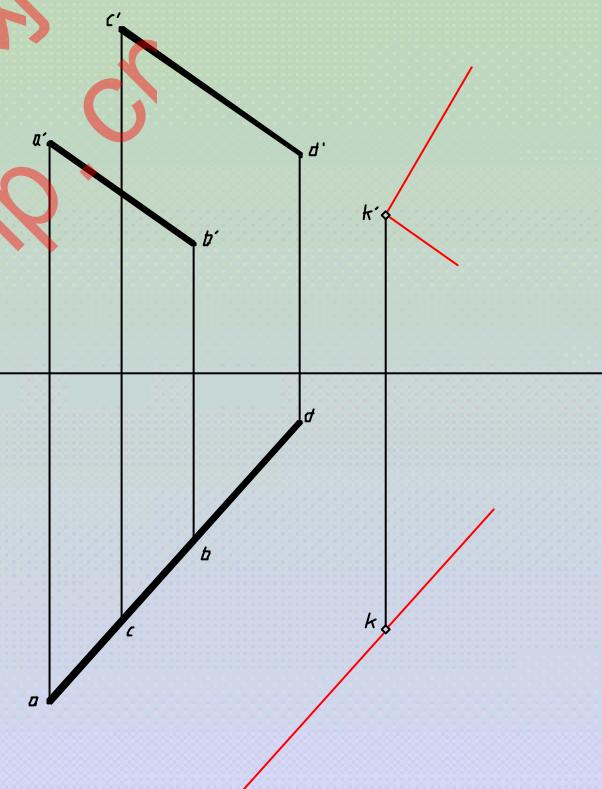


2-20 过点K作一平面平行给出的平面

(1)



(2)



习题 3-1

习题 3-2,3

习题 3-4

习题 3-5

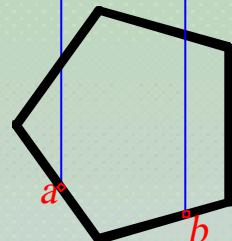
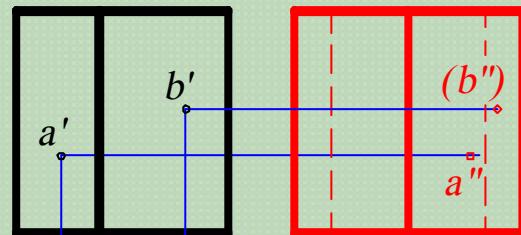
习题 3-6

返回

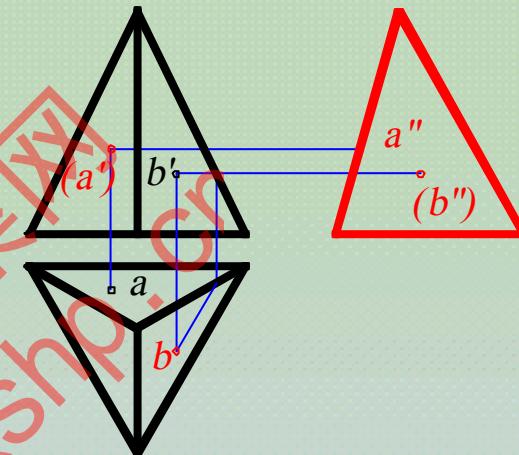
第三章 立体

3-1 补出平面立体的第三投影，并求表面点的各投影

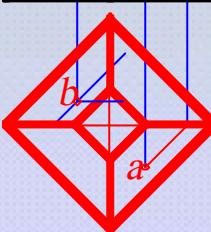
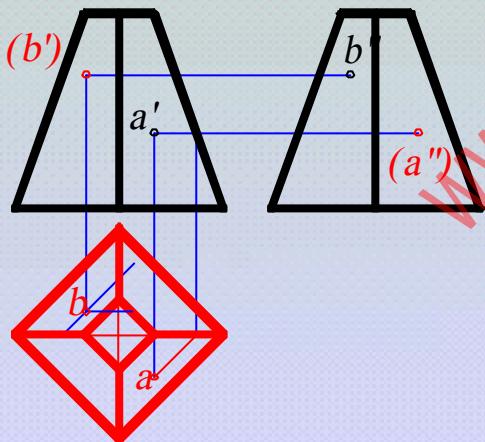
(1)



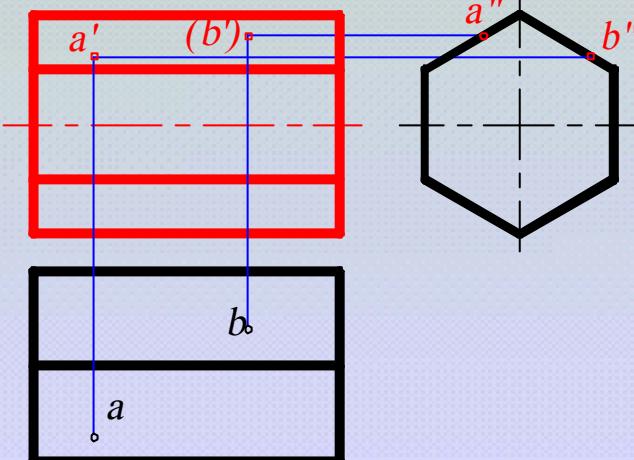
(2)



(3)

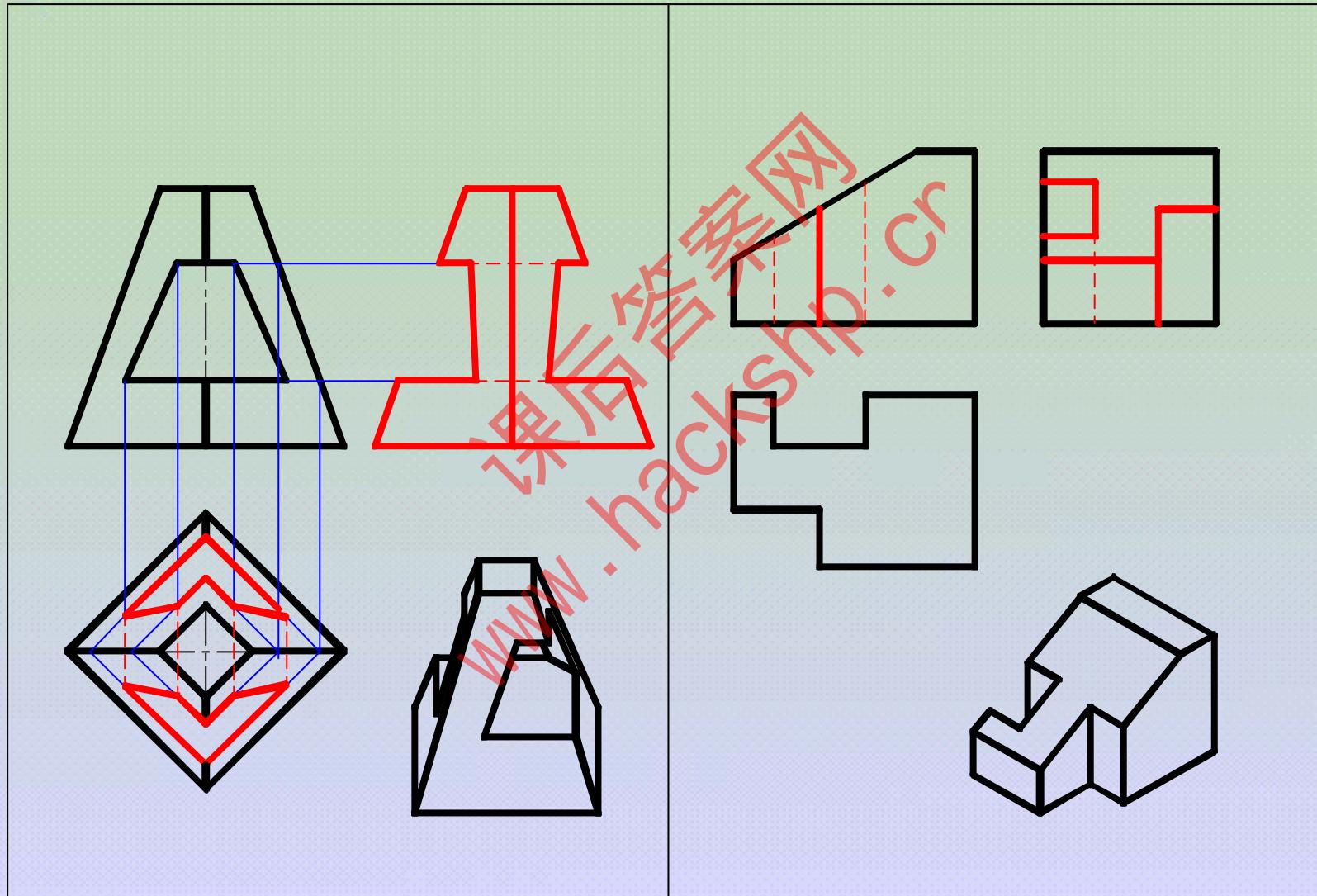


(4)



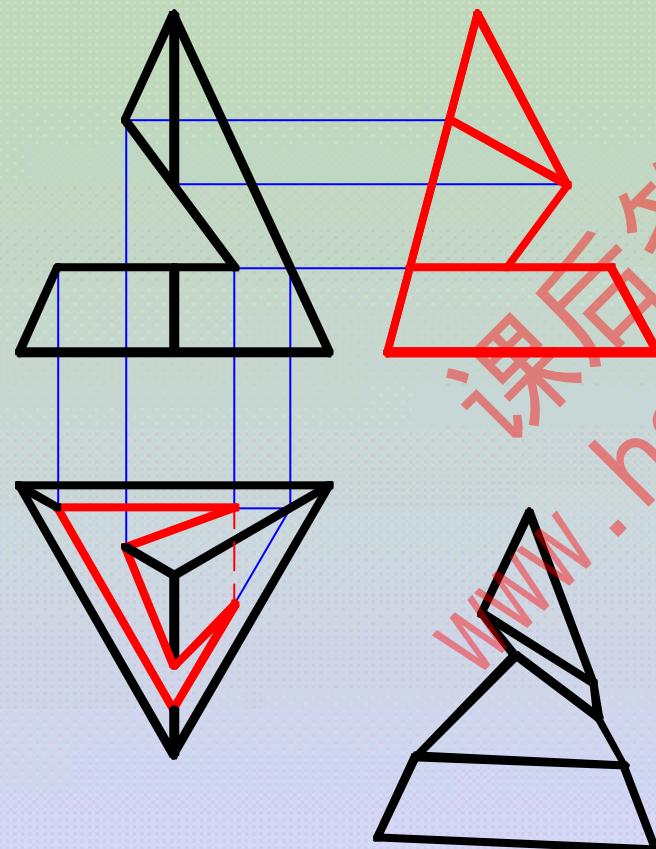
第三章 立体

3-2 补画出带梯形孔的四棱台的水平投影和侧面投影 3-3 补全有缺口平面立体的正面投影和侧面投影

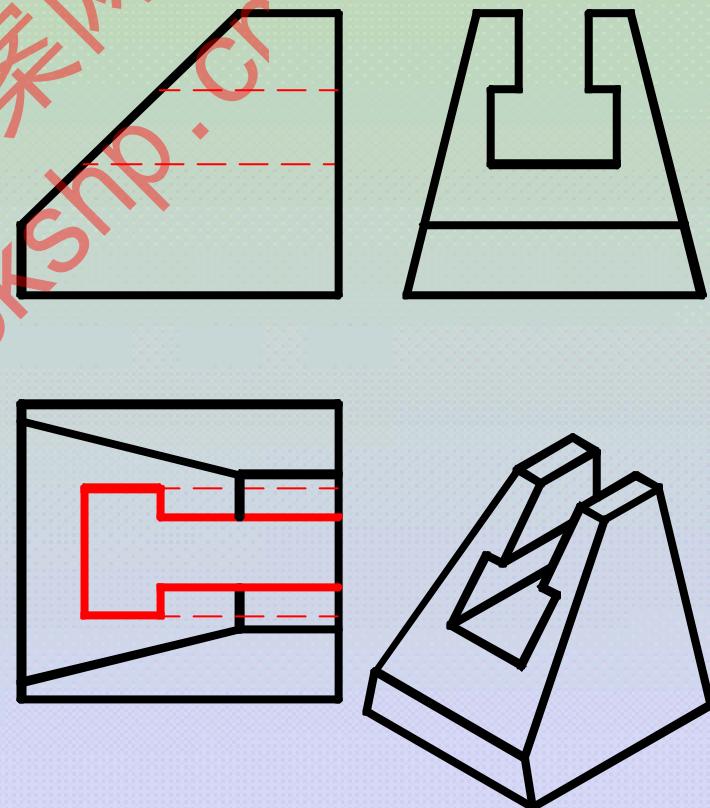


3-4 补画出带缺口立体的其它投影

(1) 补出水平投影及侧面投影

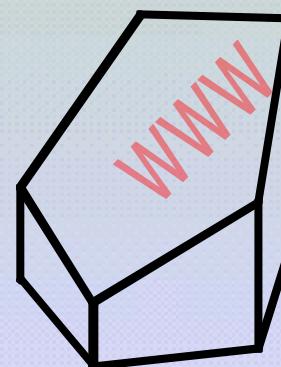
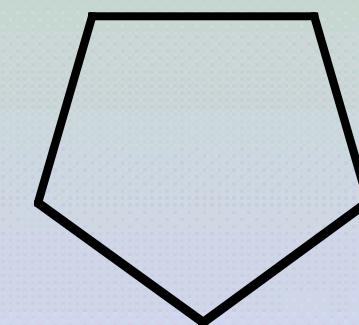
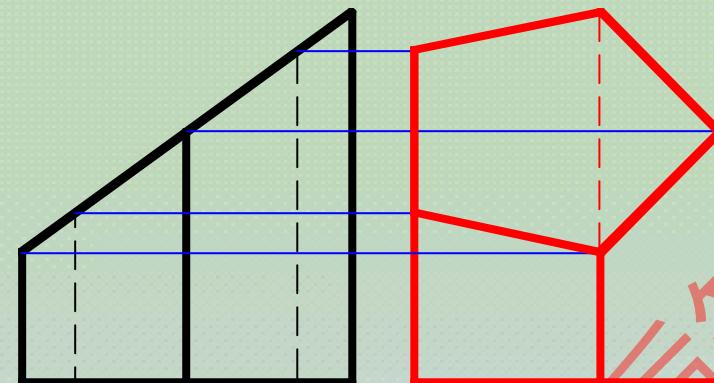


(2) 补出正面投影及水平投影

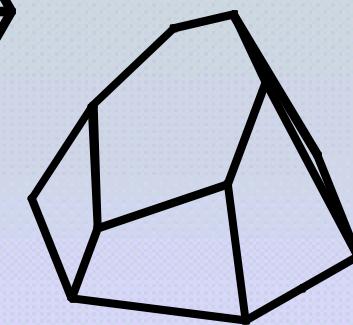
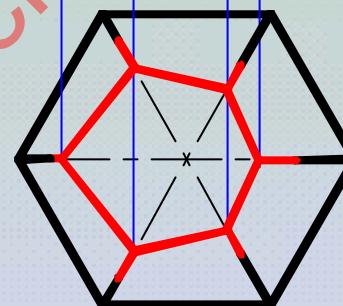
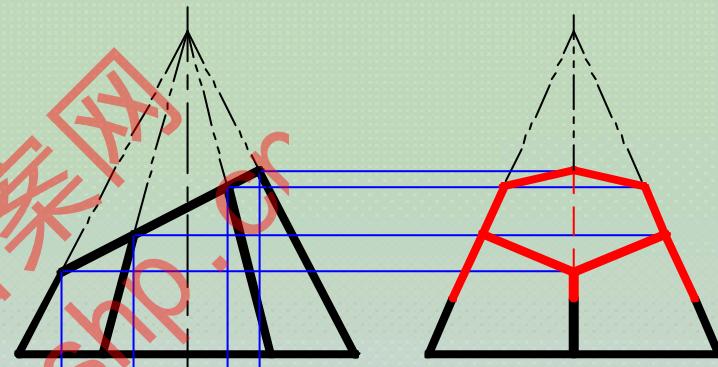


3-5 完成立体被截后的各投影图

(1)

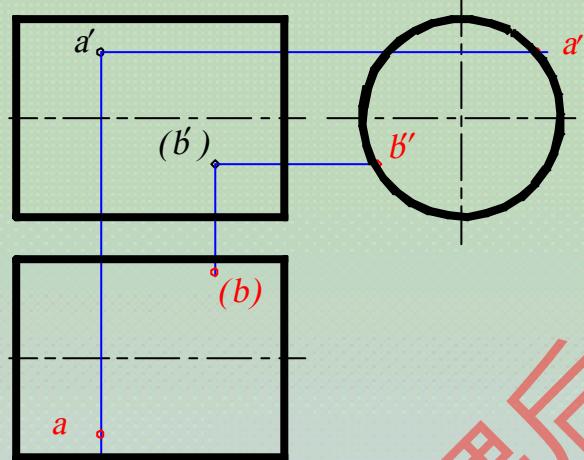


(2)

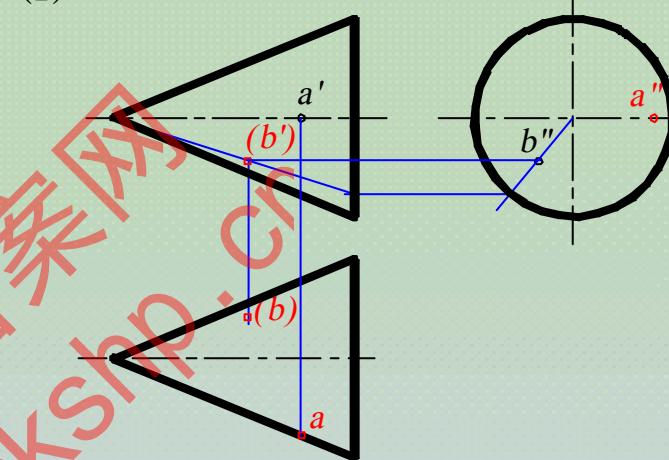


3-6 补出曲面立体表面上点的各投影

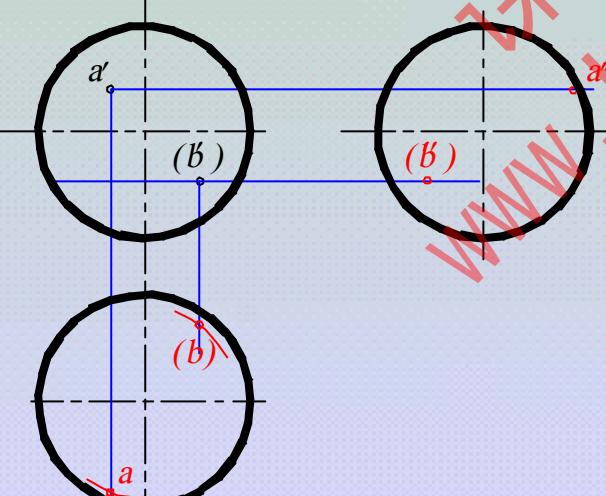
(1)



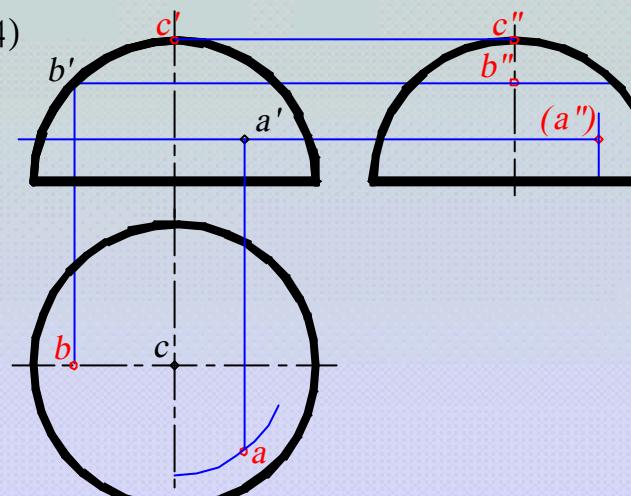
(2)



(3)



(4)



习题 4-1

习题 4-2

习题 4-3

习题 4-4

习题 4-5

习题 4-6

习题 4-7

习题 4-8

习题 4-9

习题 4-10

习题 4-11

习题 4-12

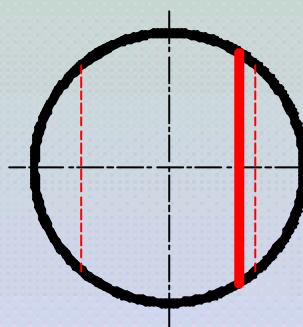
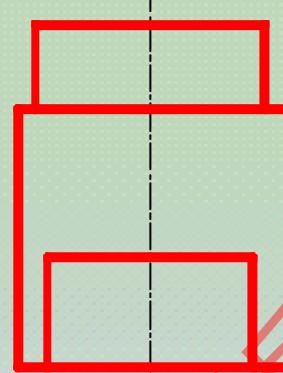
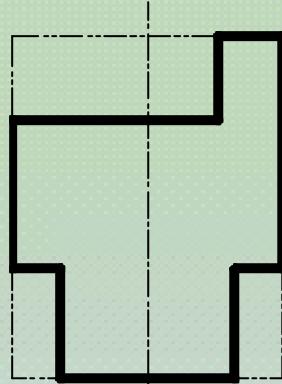
习题 4-13

习题 4-14

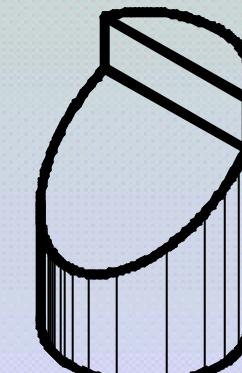
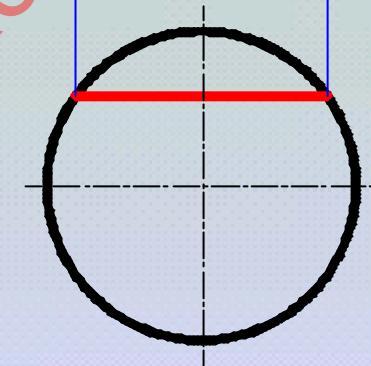
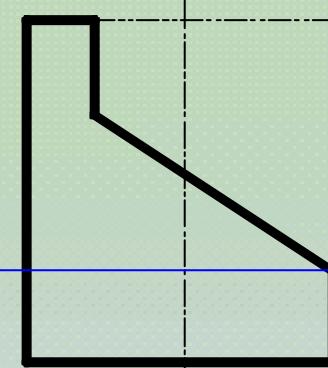
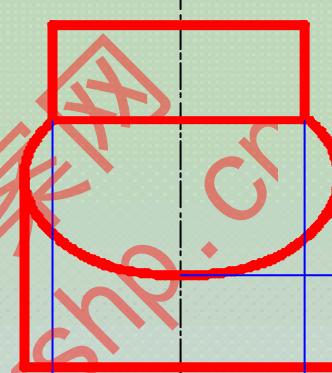
返回

4-1 完成曲面立体被截切后的各投影

(1)

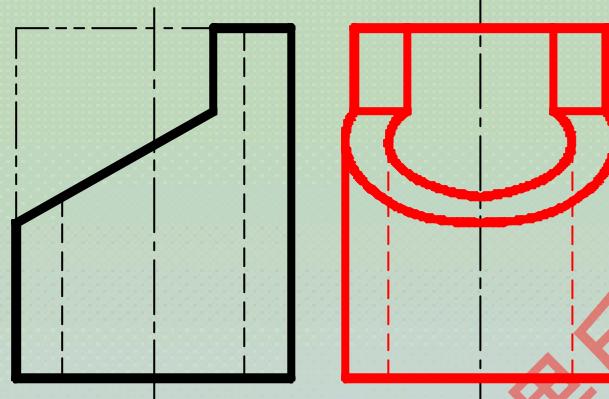


(2)

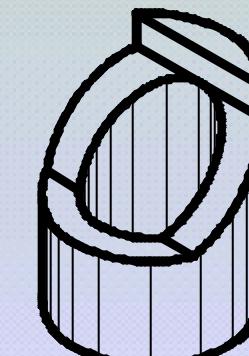
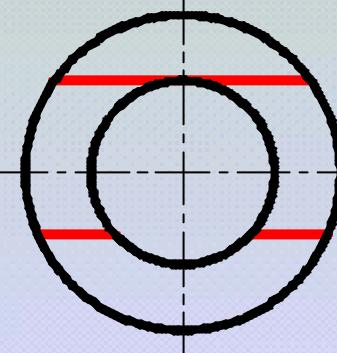
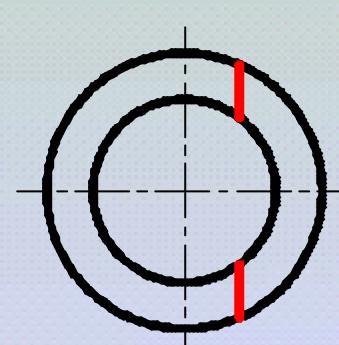
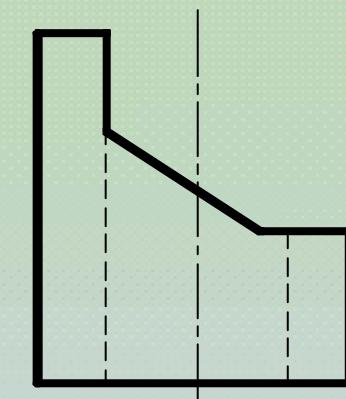


4-2 完成曲面立体被截切后的各投影

(1)

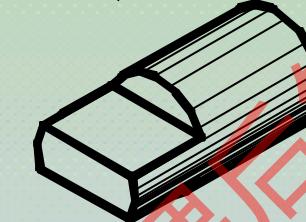
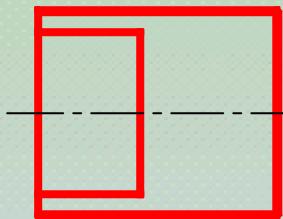
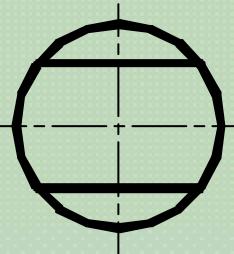
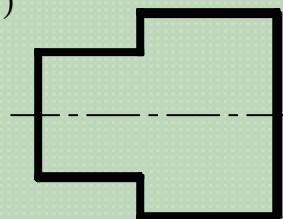


(2)

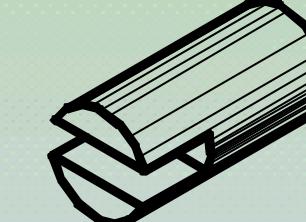
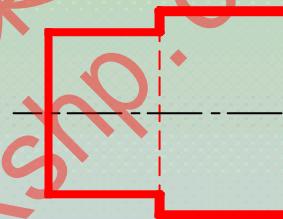
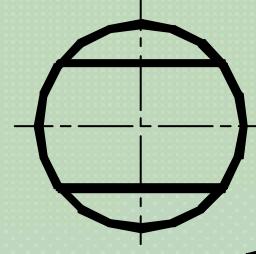
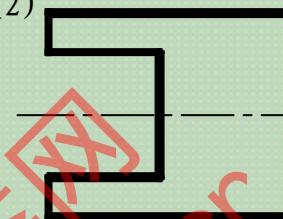


4-3 补画出立体的水平投影

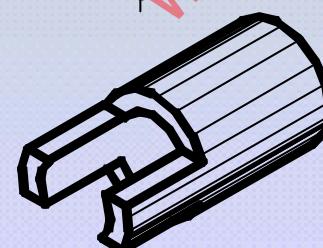
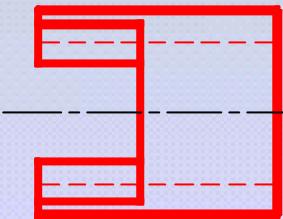
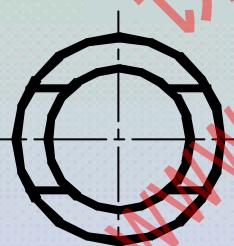
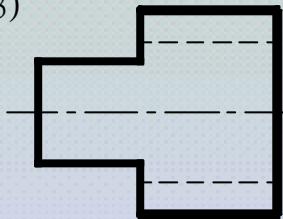
(1)



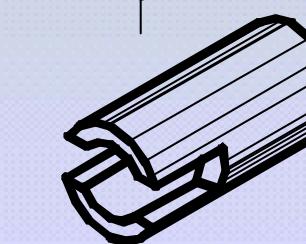
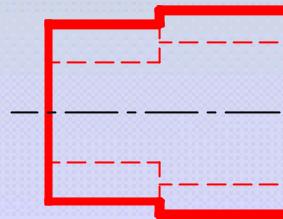
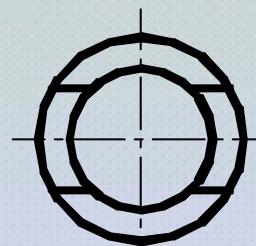
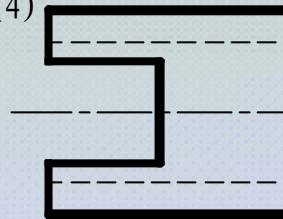
(2)



(3)

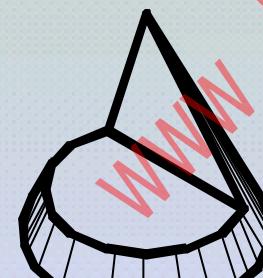
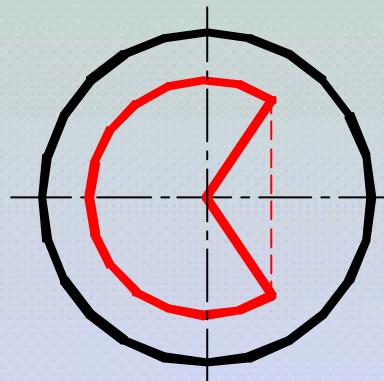
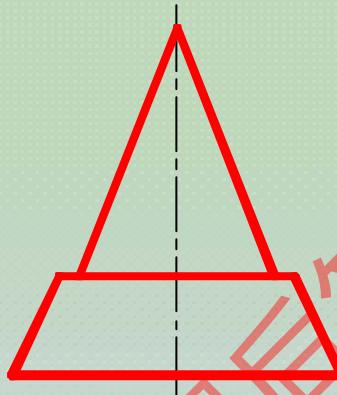
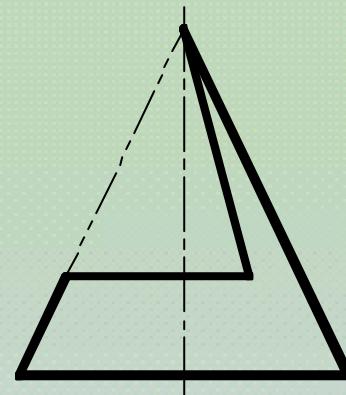


(4)

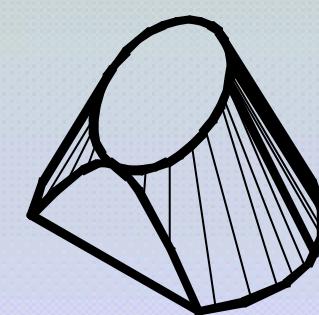
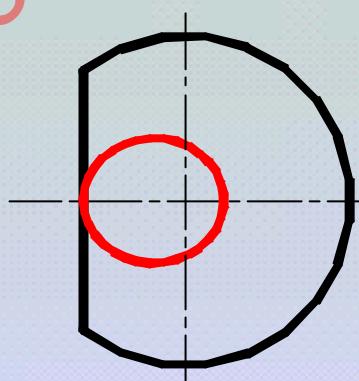
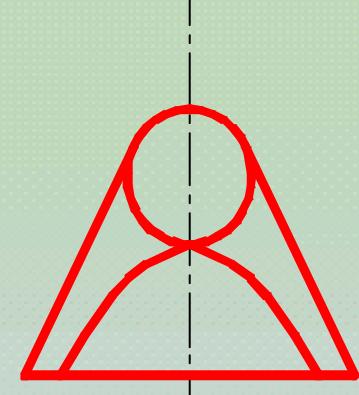


4-4 完成圆锥被截切后的各投影

(1)

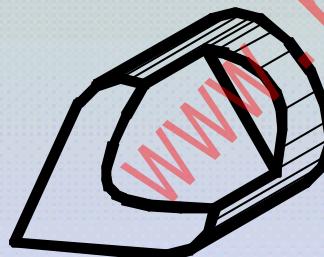
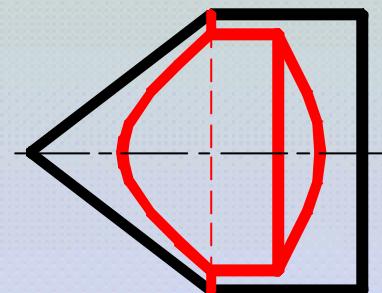
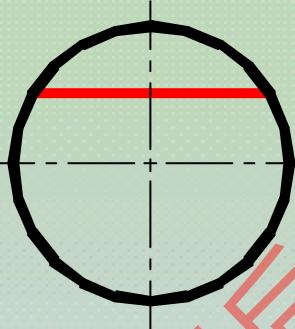
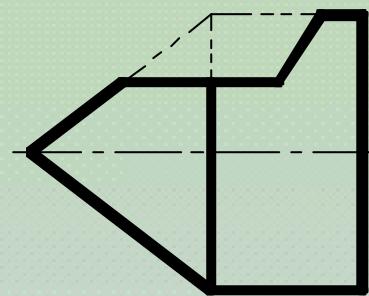


(2)

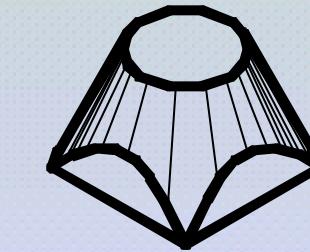
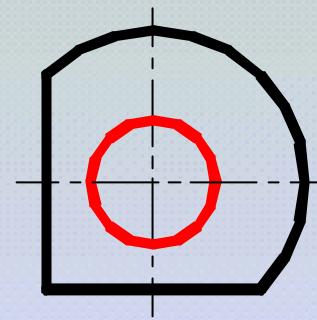
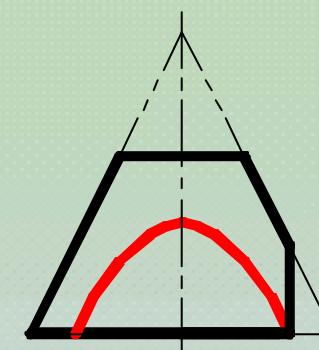
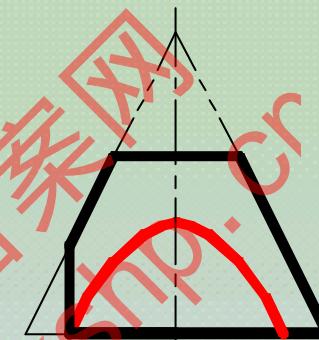


4-5 完成曲面立体被截切后的各投影

(1)

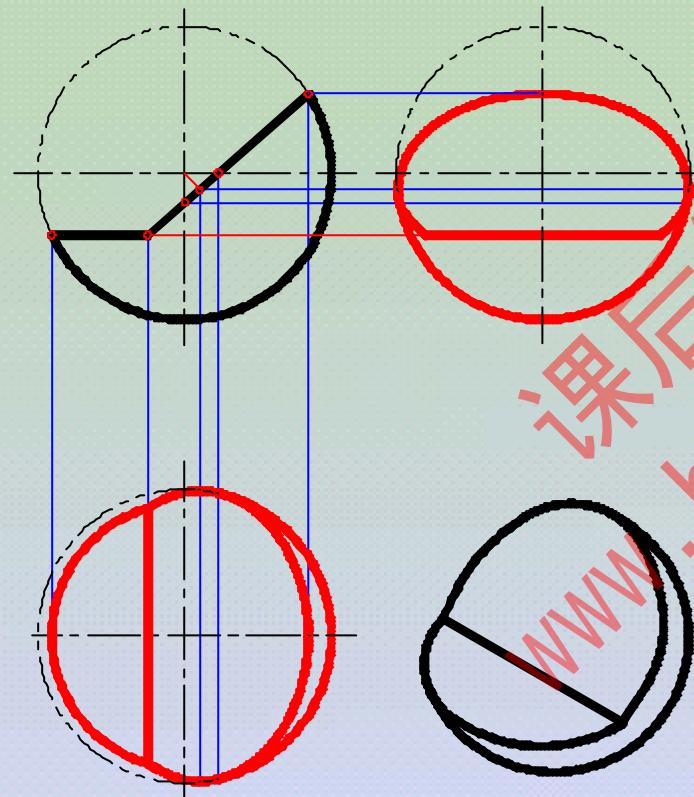


(2)

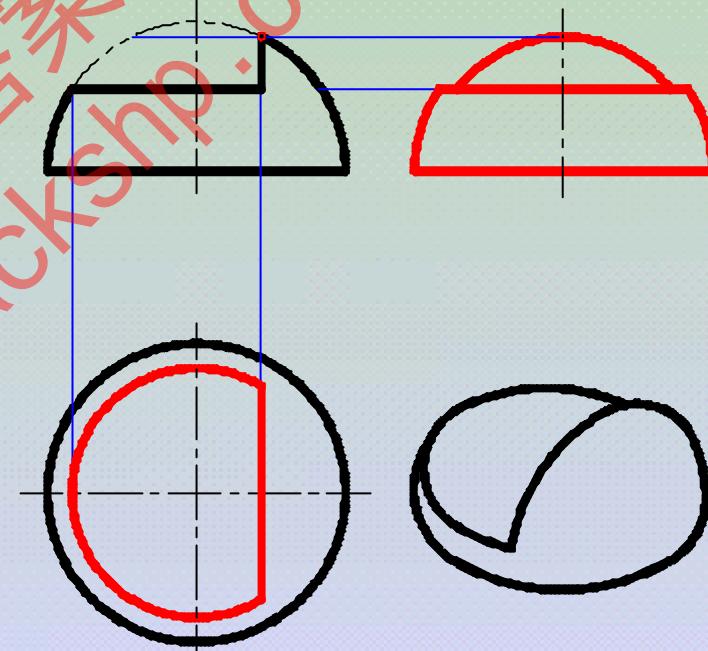


4-6 完成圆球被截切后的各投影

(1)

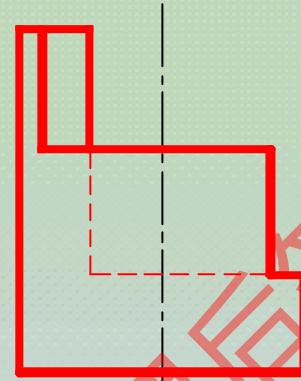
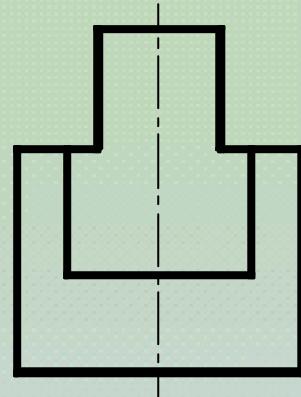


(2)

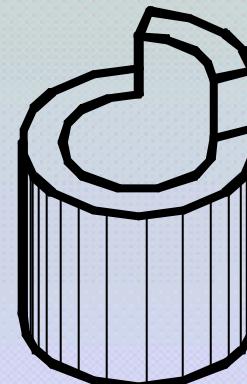
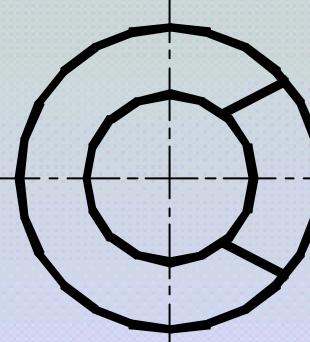
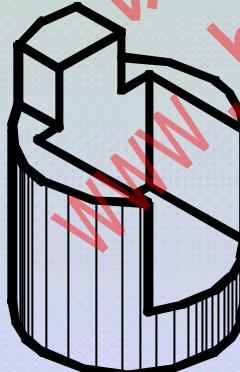
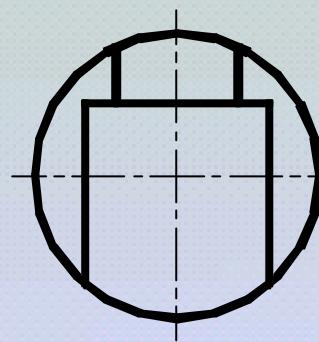
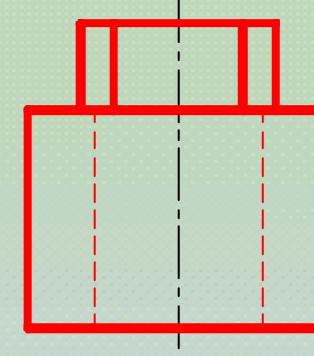
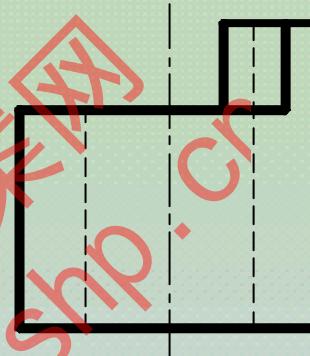


4-7 画出曲面立体被截切后的侧面投影

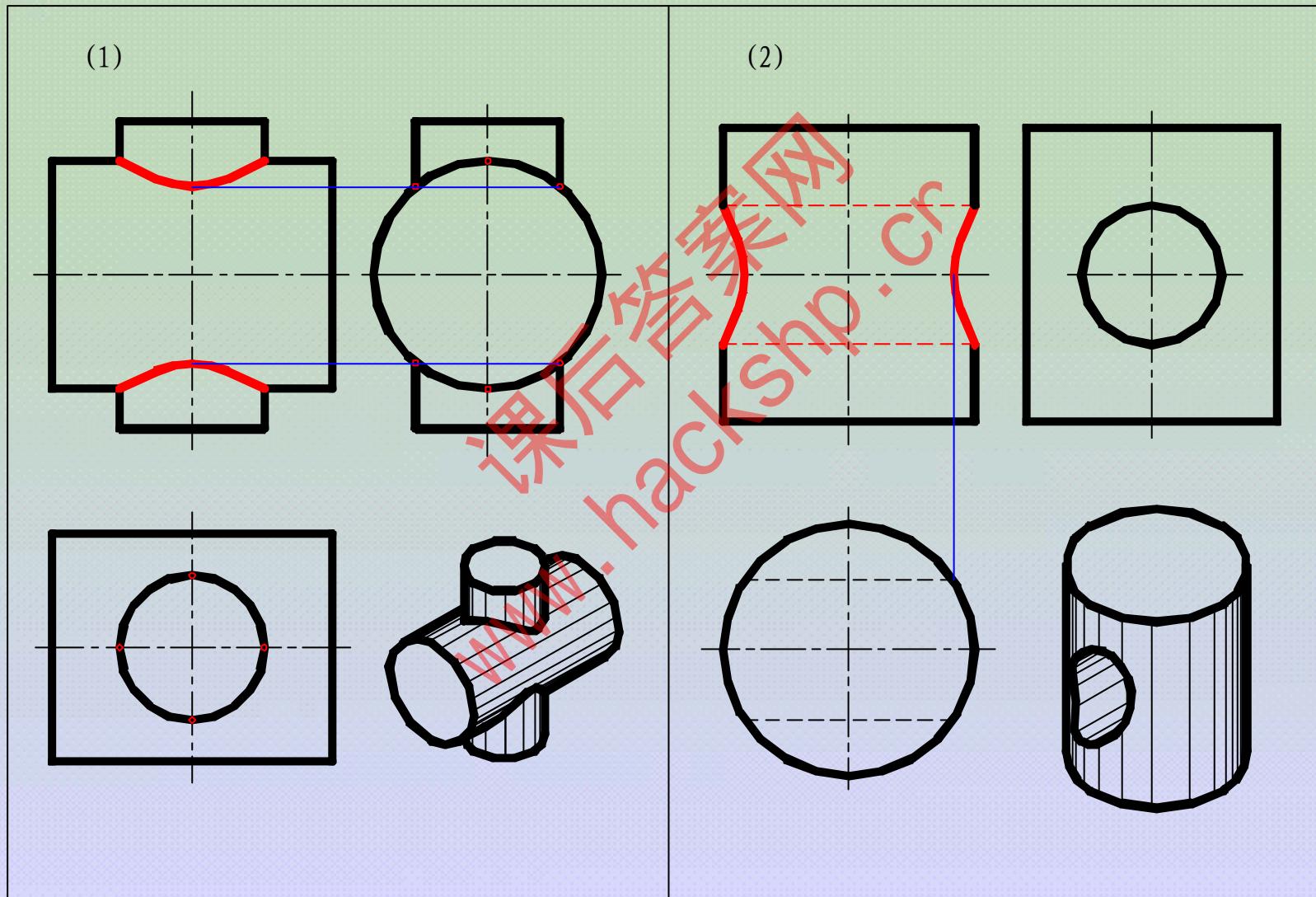
(1)



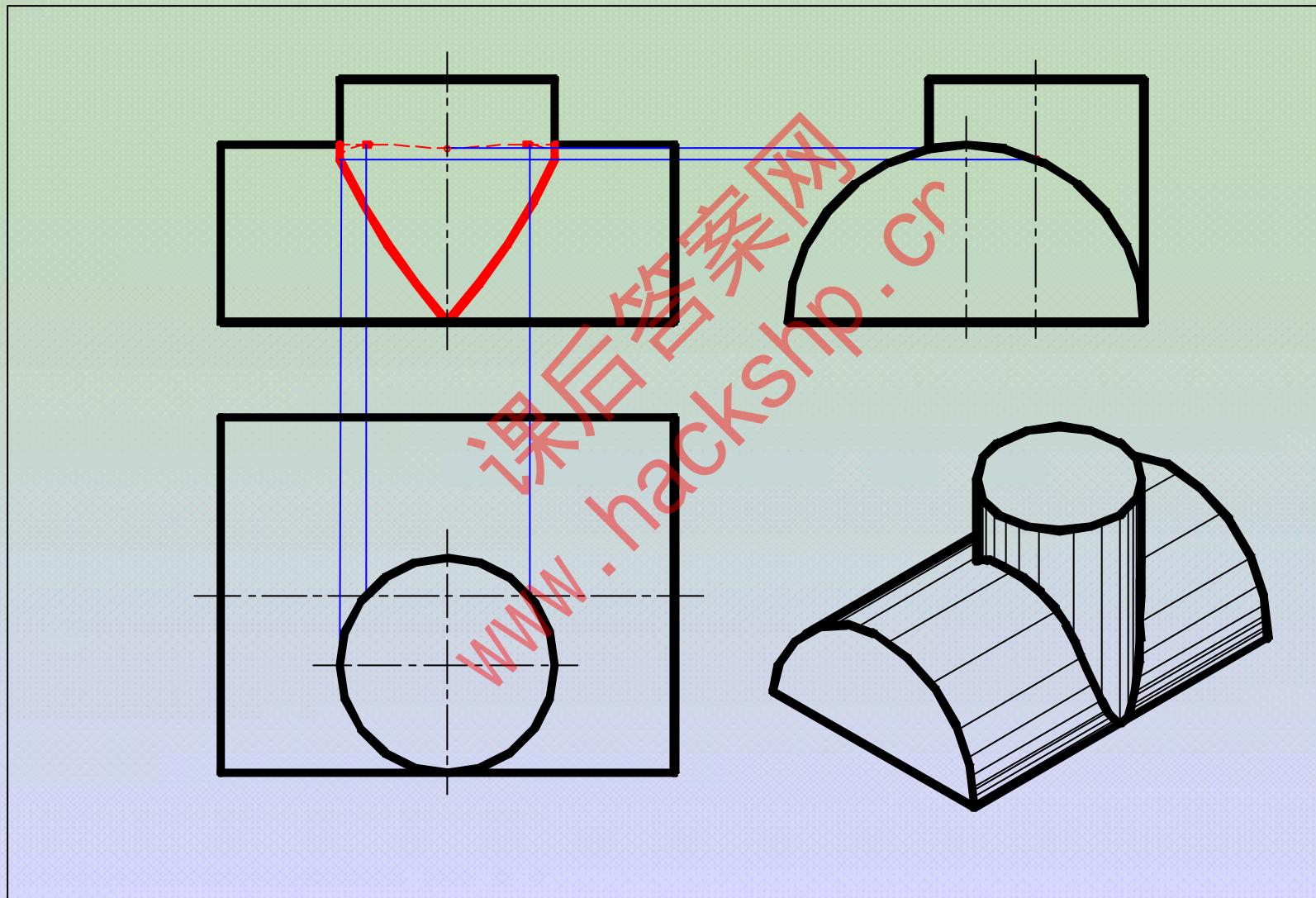
(2)



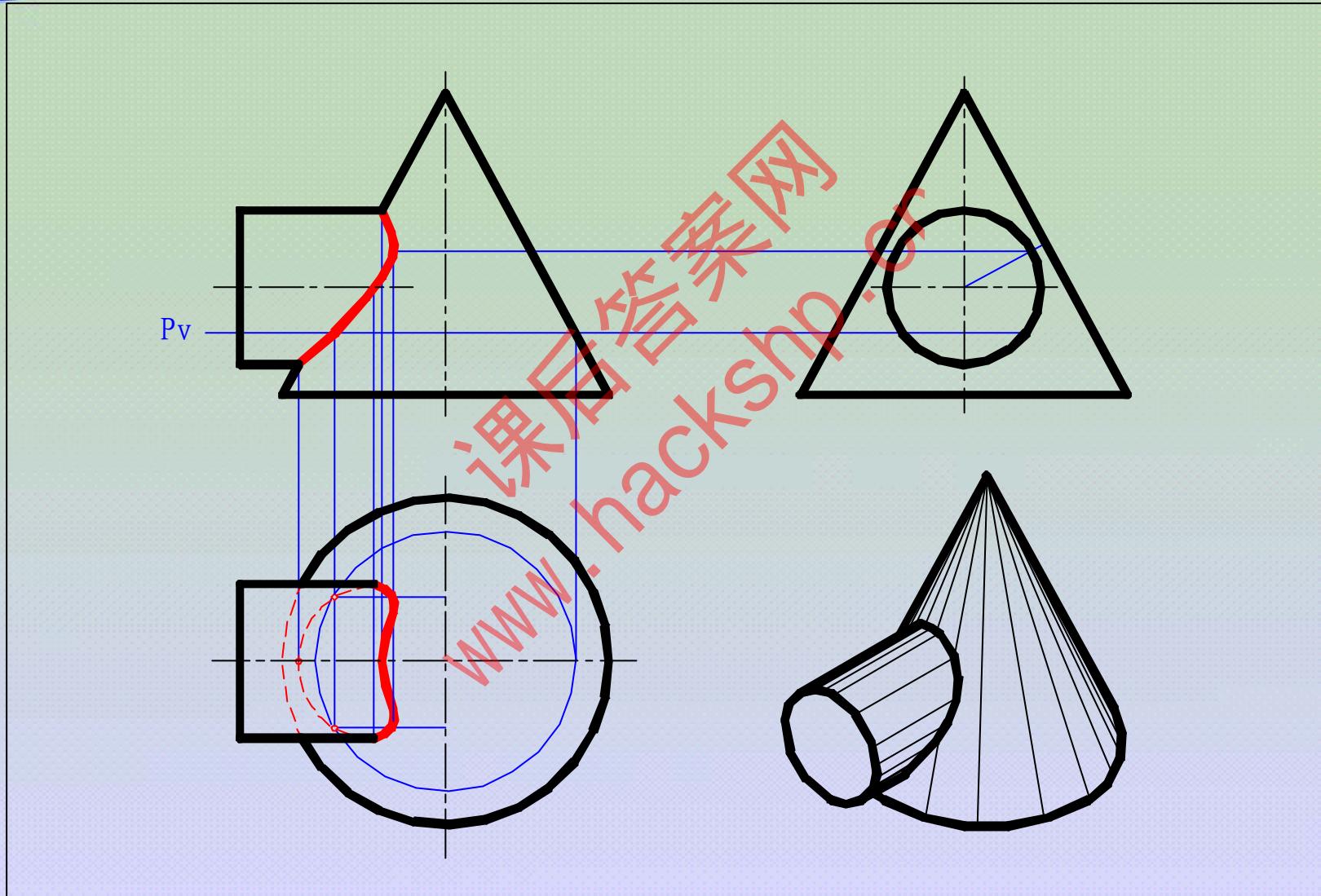
4-8 作两圆柱相贯的投影



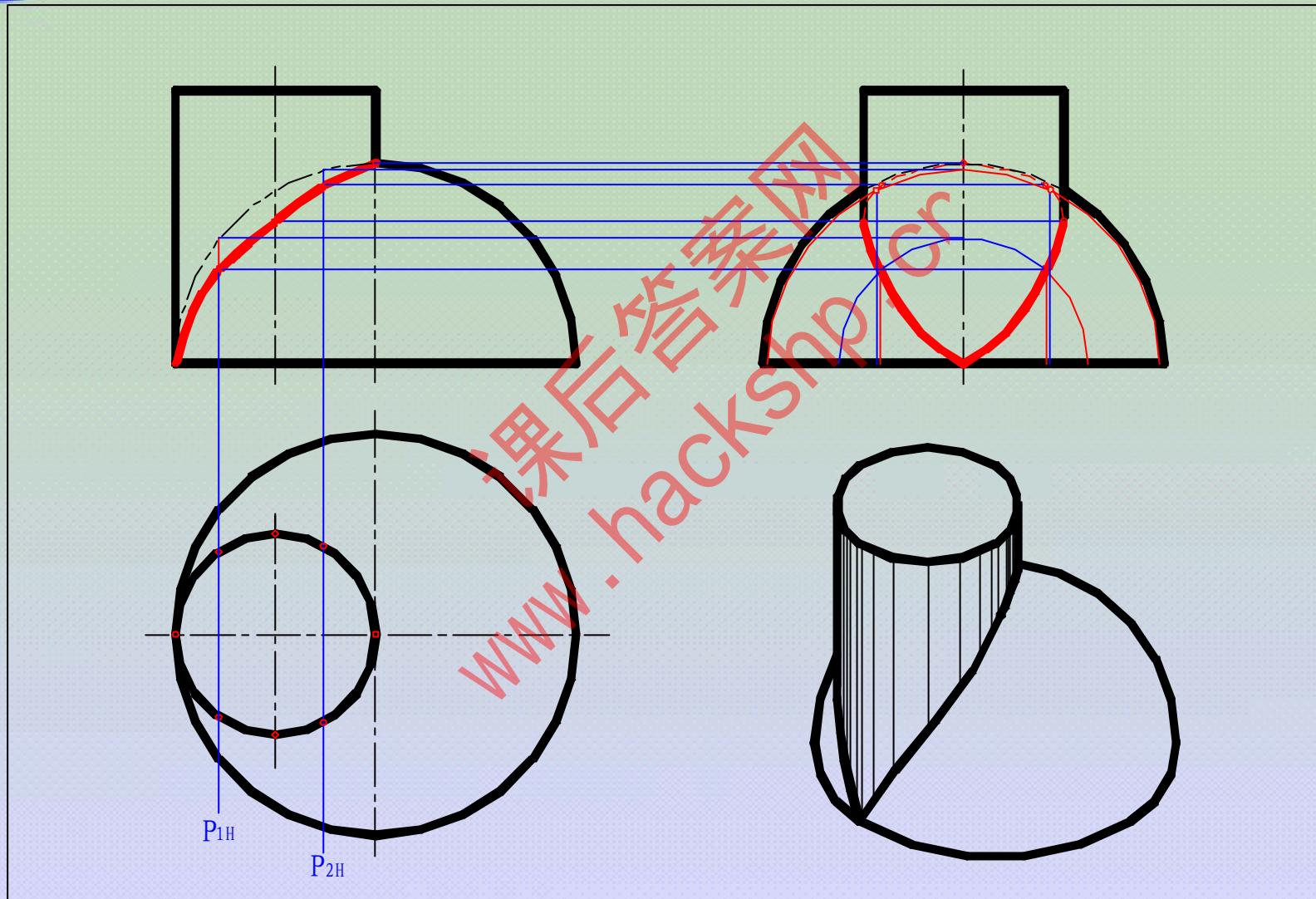
4-9 作二曲面立体相贯线的投影



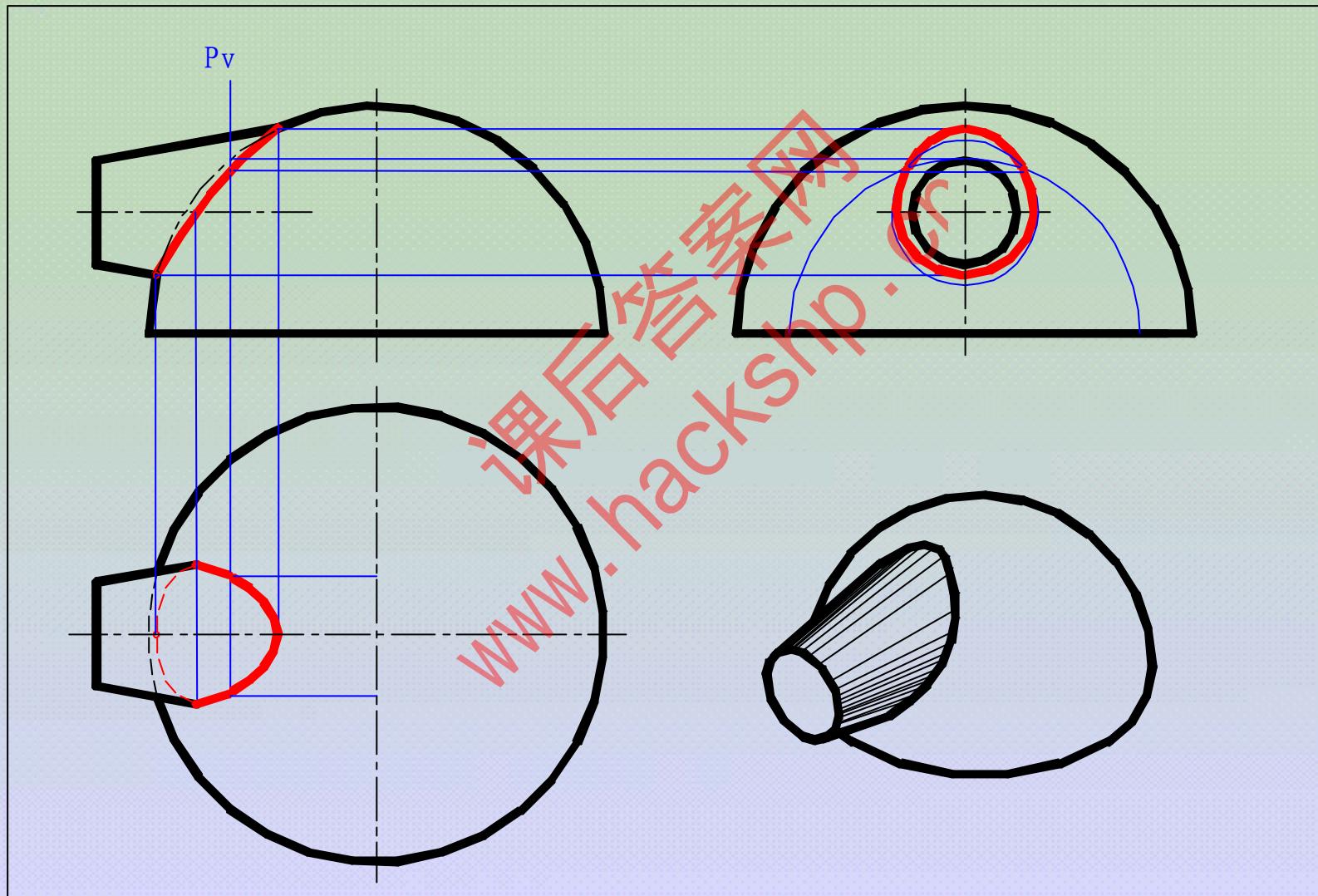
4-10 求圆柱与圆锥的表面交线。



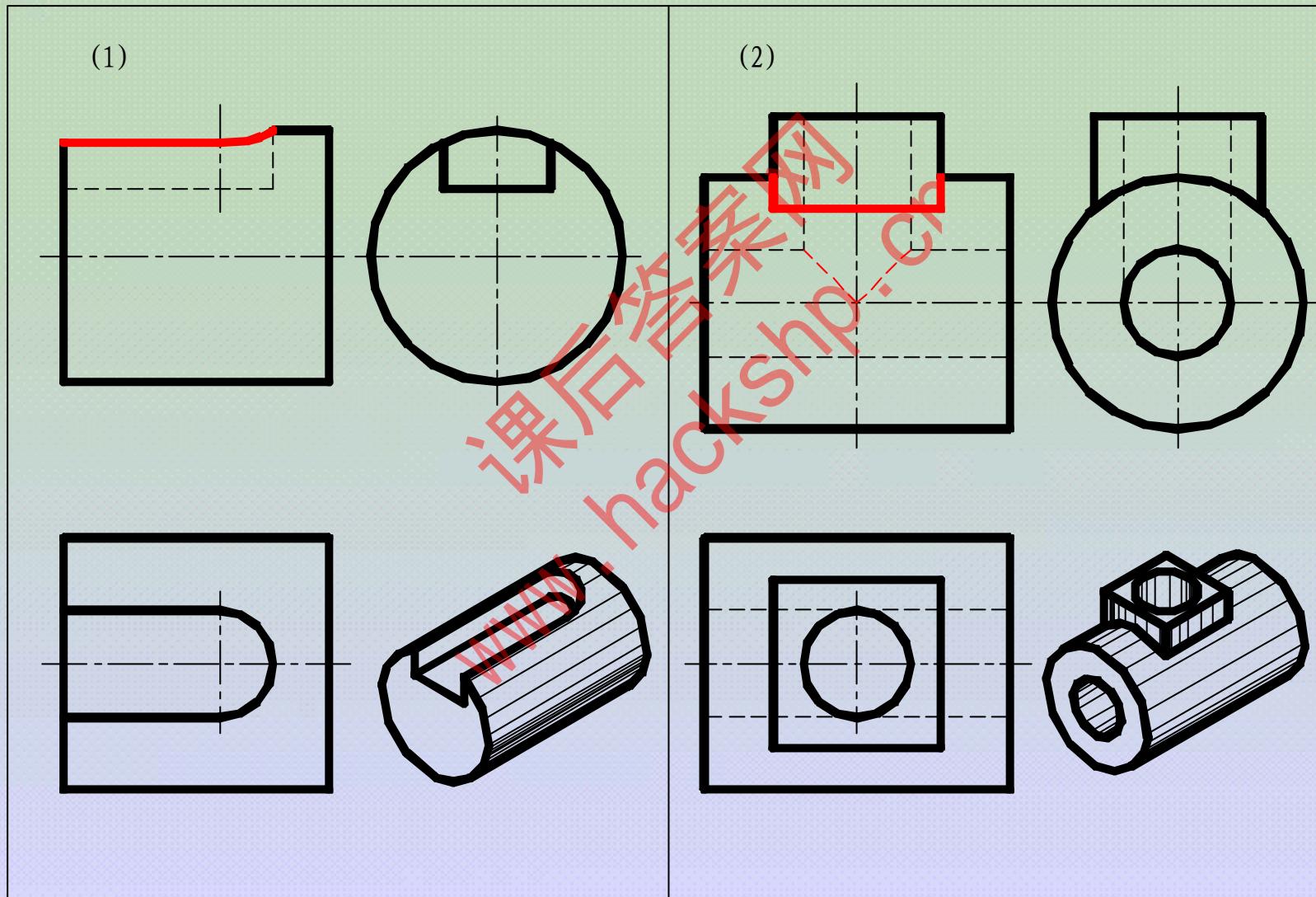
4-11 作出半圆球与圆柱的表面交线



4-12 作出圆台与半球表面交线

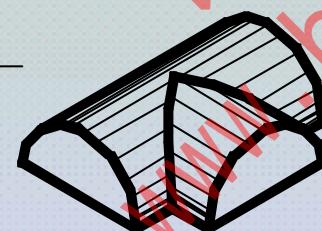
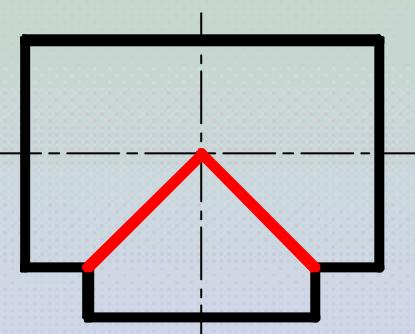
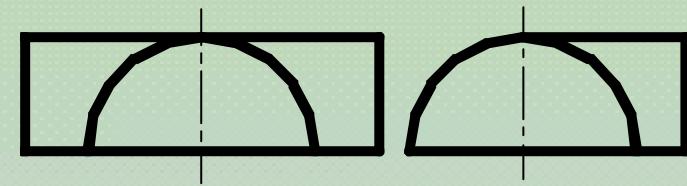


4-13 补画立体表面交线的正面投影

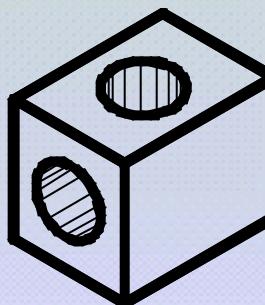
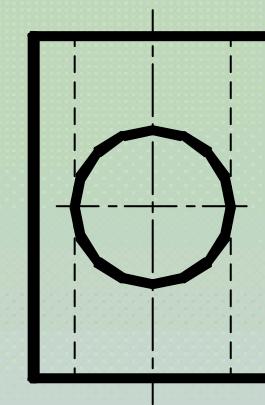
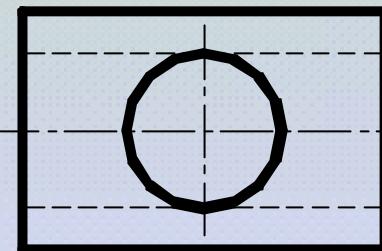
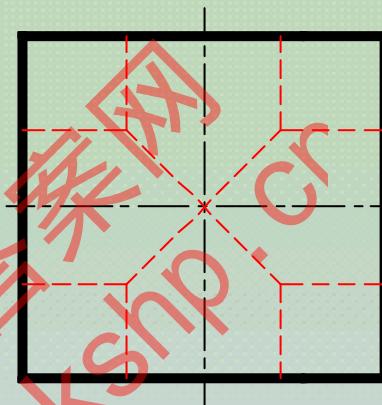


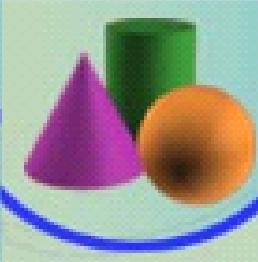
4-14 作出立体的表面交线

(1)



(2)





习题 5-1

习题 5-2

习题 5-3

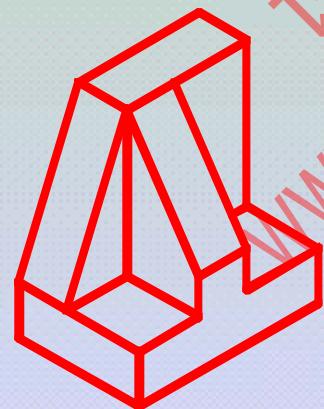
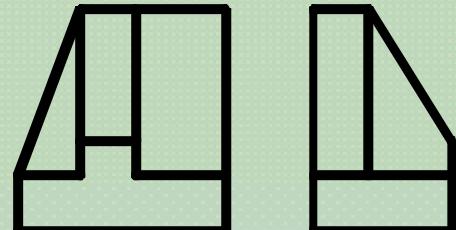
习题 5-4,5

习题 5-6

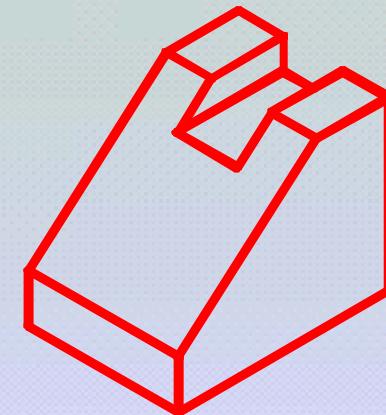
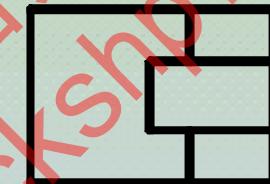
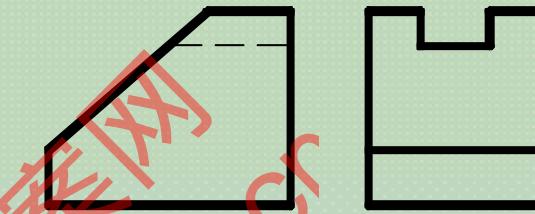
返回

5-1 画正等测轴测图

(1)

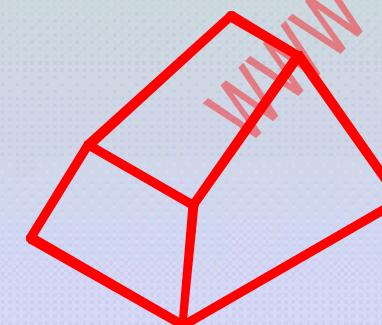
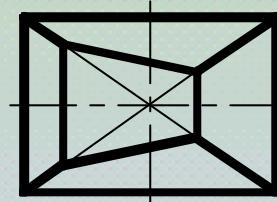
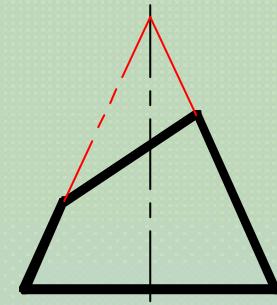


(2)

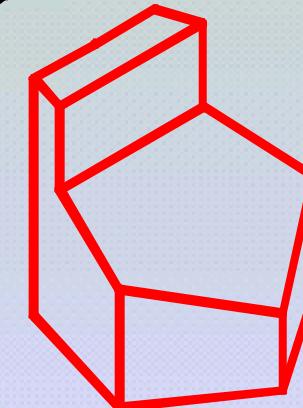
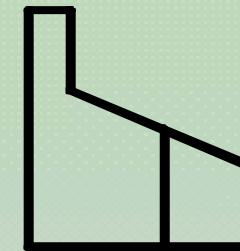
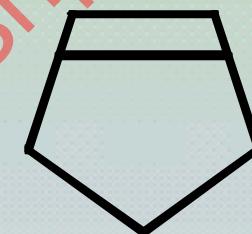
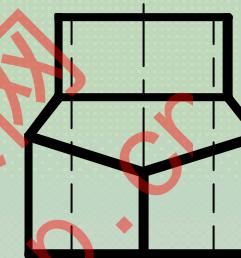


5-2 画正等测轴测图

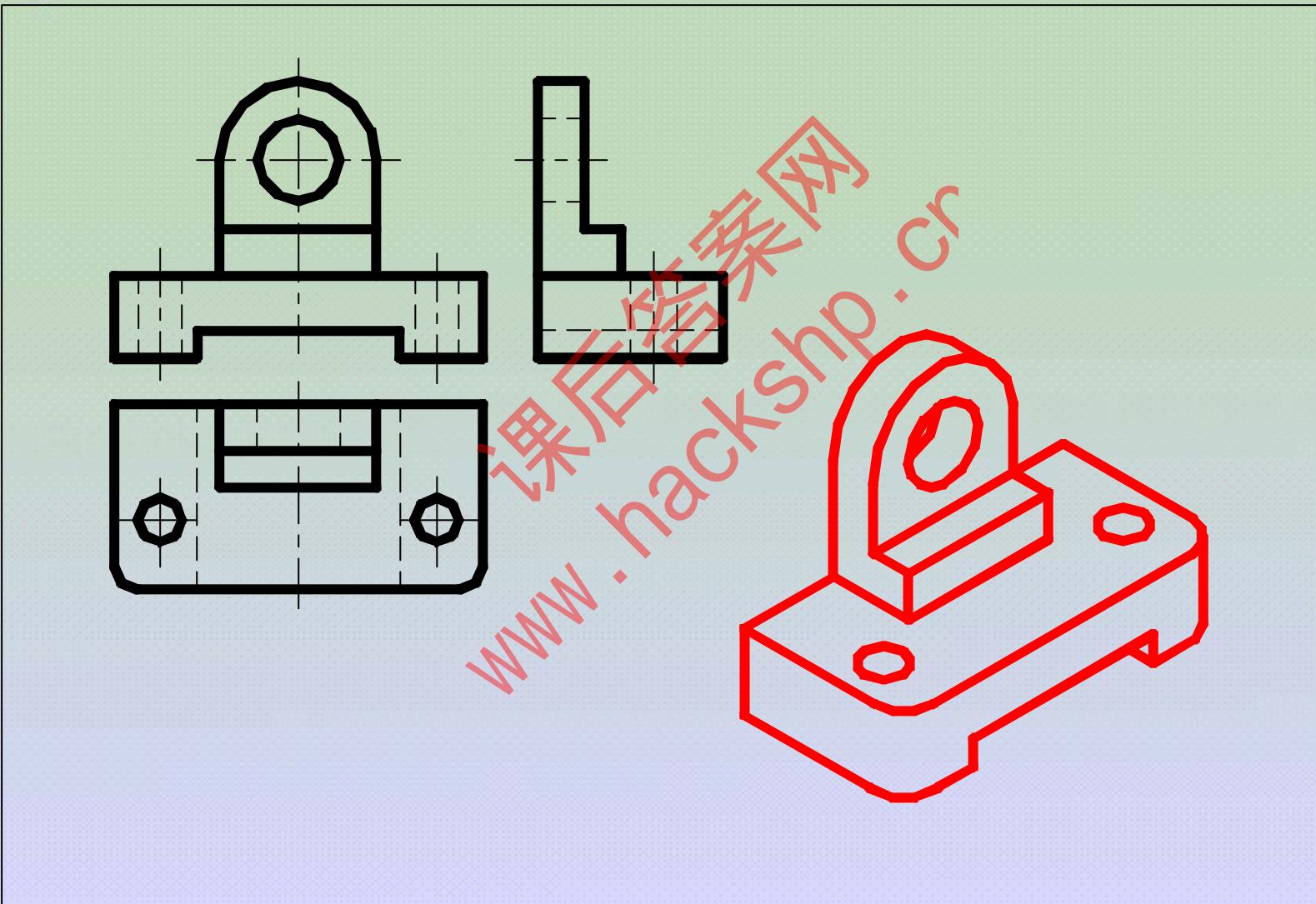
(1)



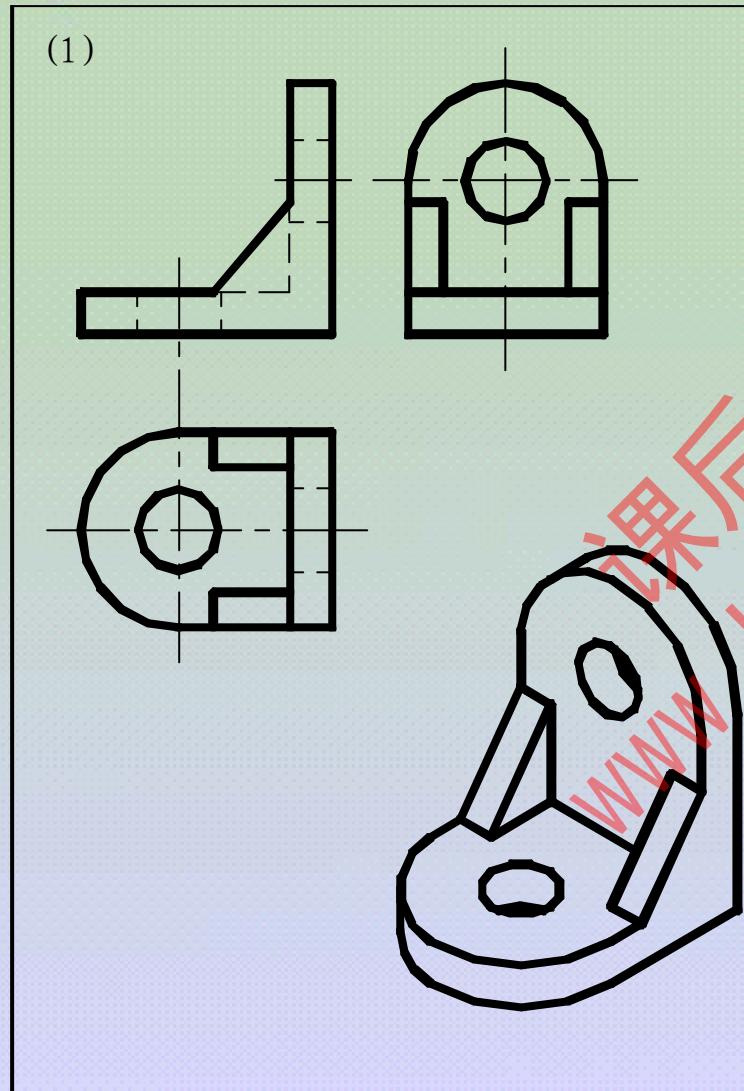
(2)



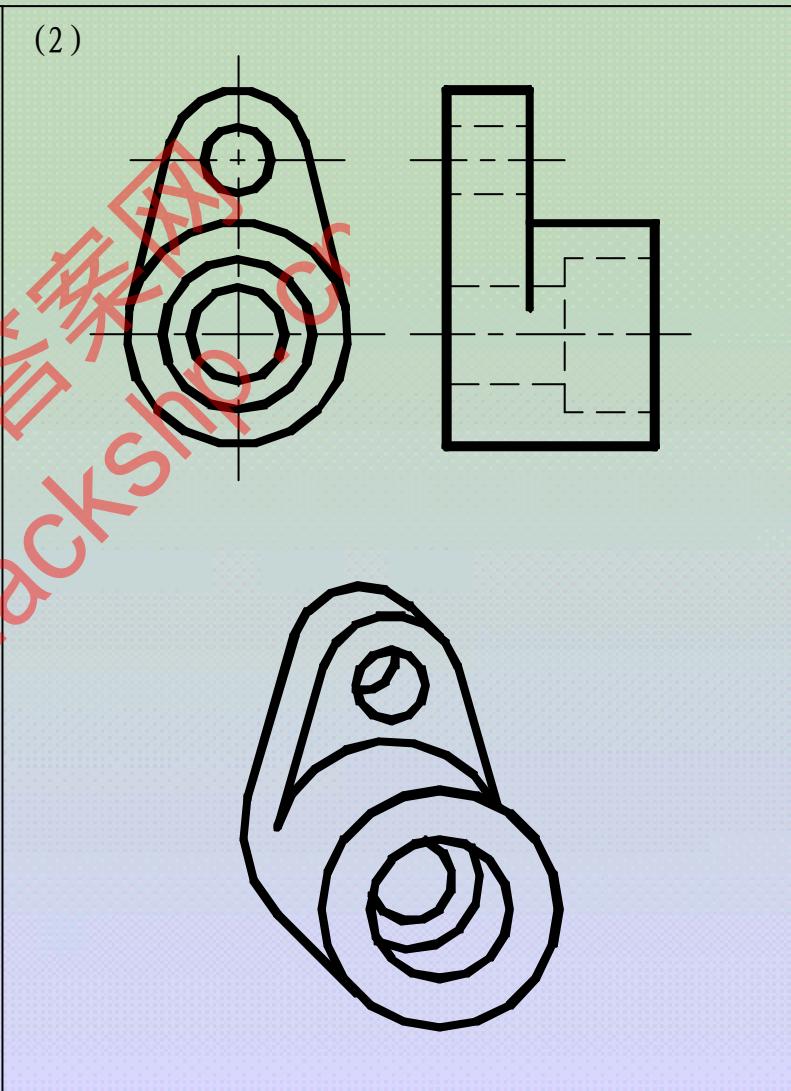
5-3 画正等测轴测图



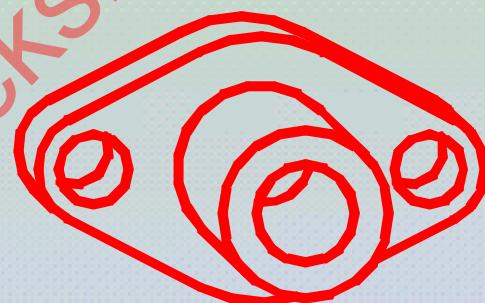
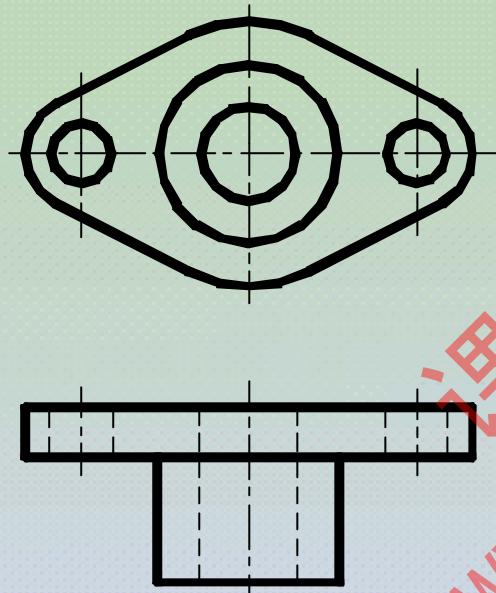
5-4 画正等测轴测图



5-5 画斜二测轴测图



5-6 画斜二测轴测图



课后答案网
www.hackshp.cn



习题 6-1

习题 6-2

习题 6-3

习题 6-4

习题 6-5

习题 6-6

习题 6-7

习题 6-8

习题 6-9

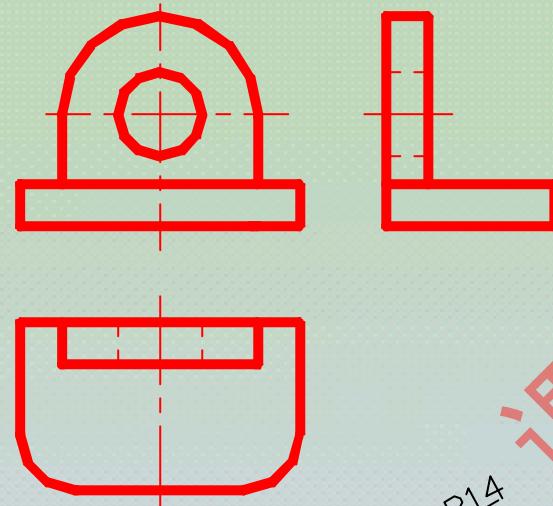
习题 6-10

习题 6-11

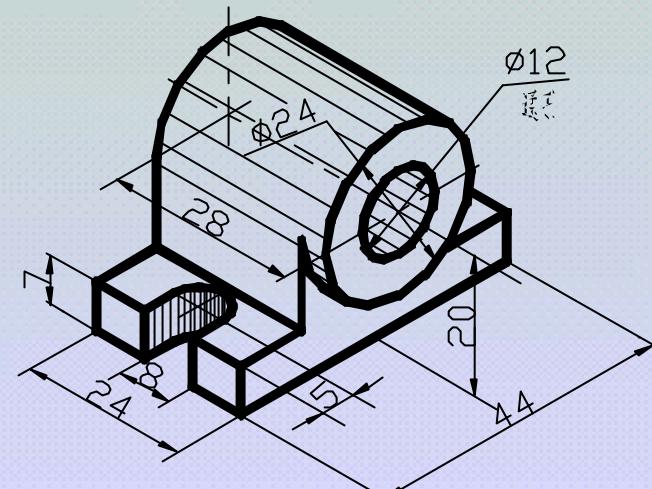
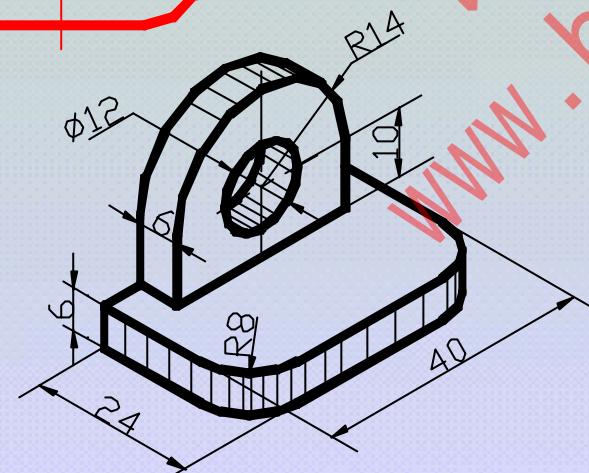
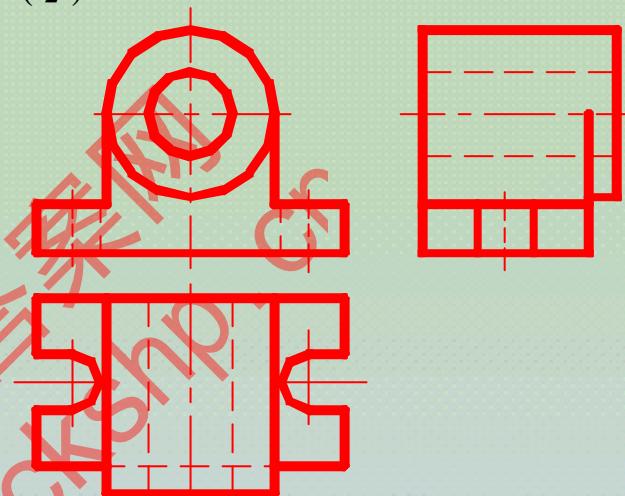
返回

6-1 根据组合体轴测图, 画其三面投影图

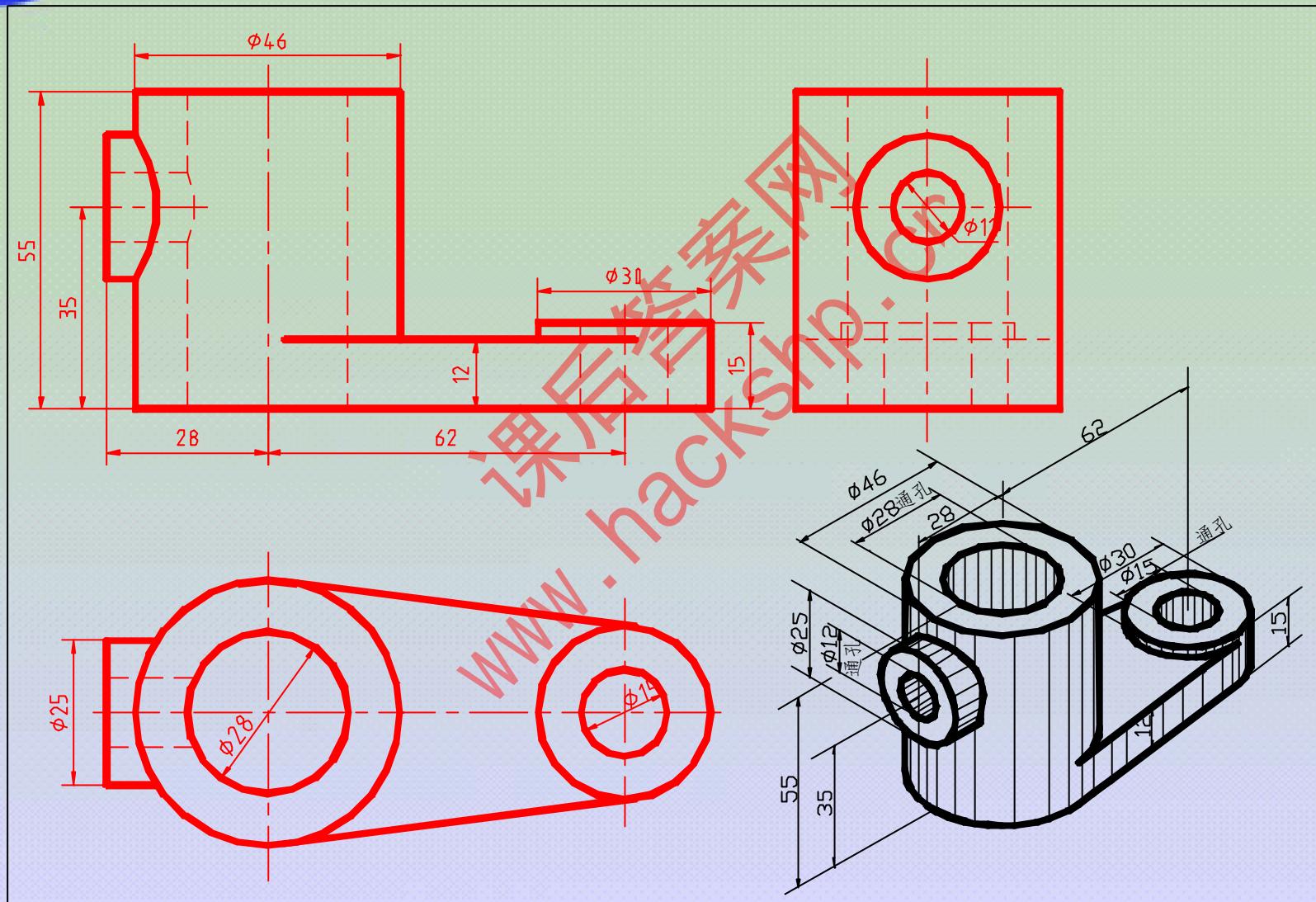
(1)



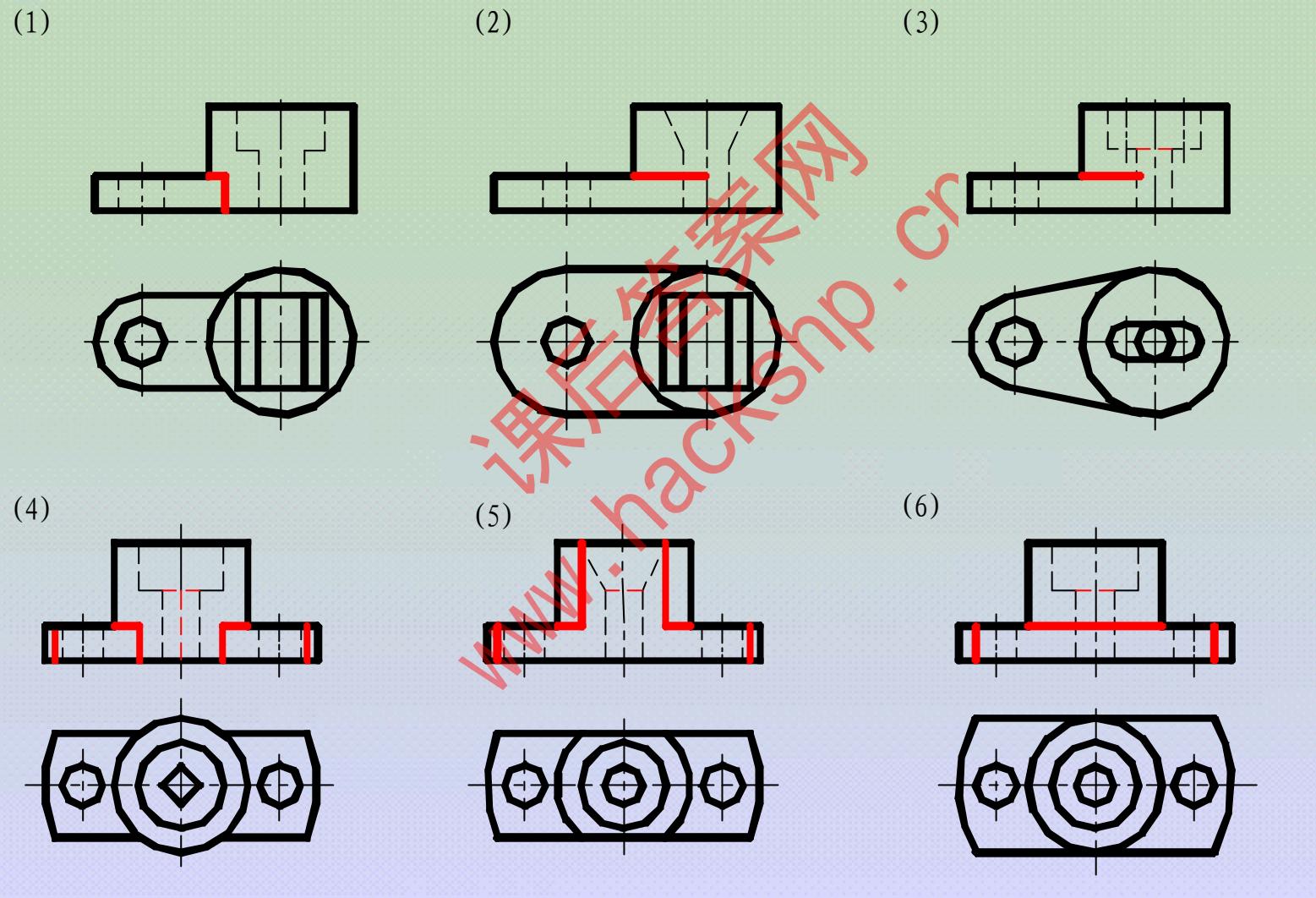
(2)



6-2 根据轴测图, 画出组合体的三面投影图 (按: 1比例), 并标注尺寸

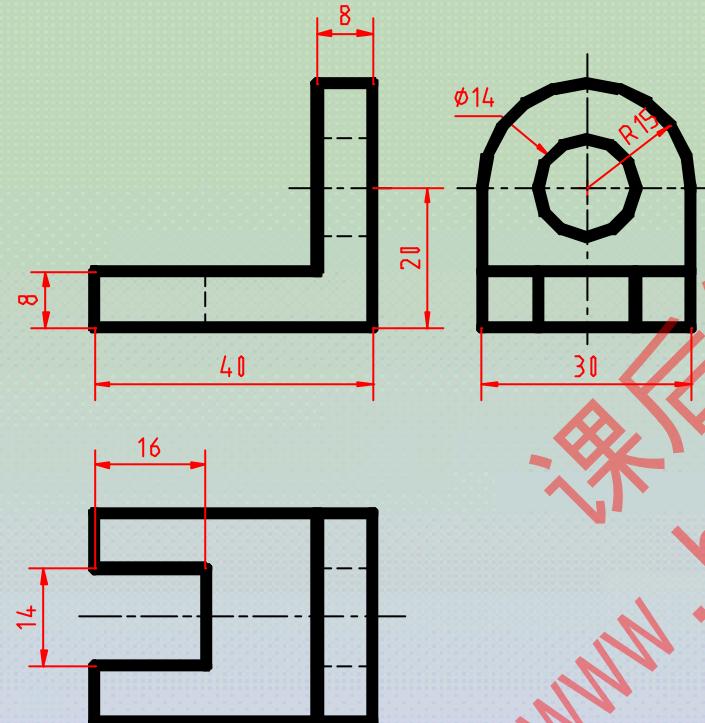


6-3 补画正面投影图中缺少的图线

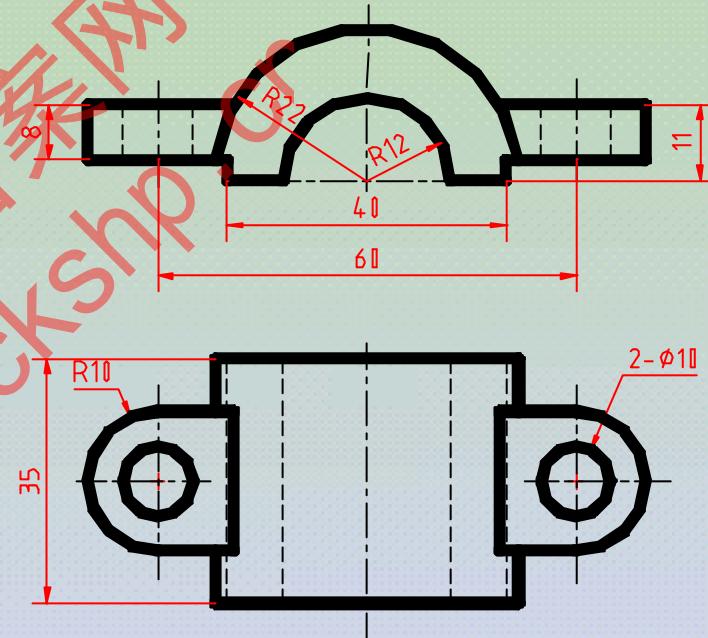


6-4 标注下列物体的尺寸 (按1:1比例)

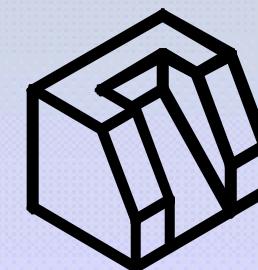
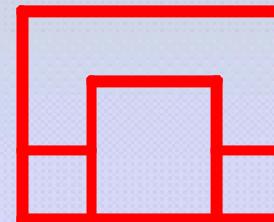
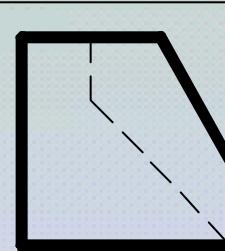
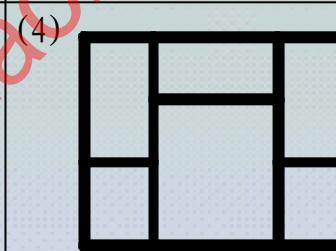
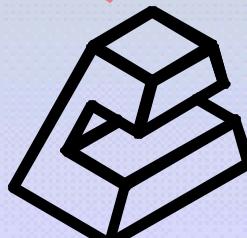
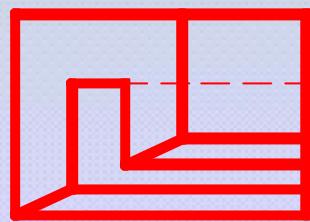
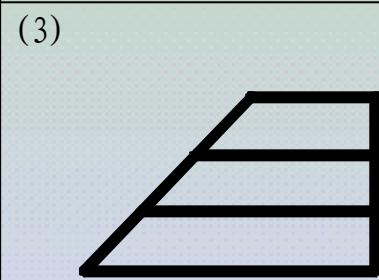
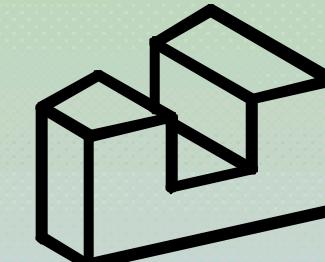
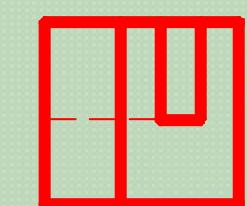
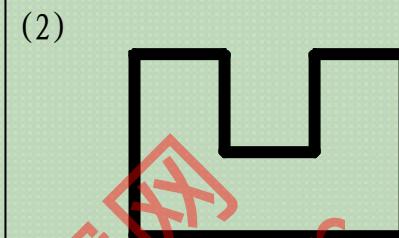
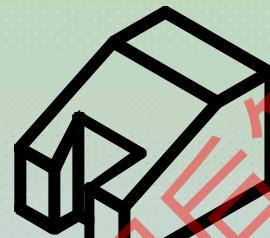
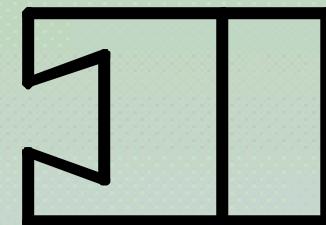
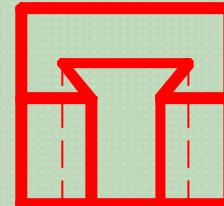
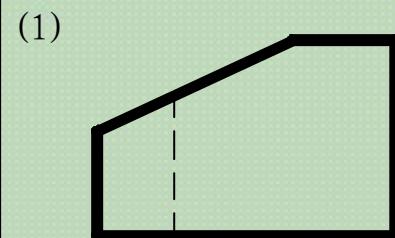
(1)



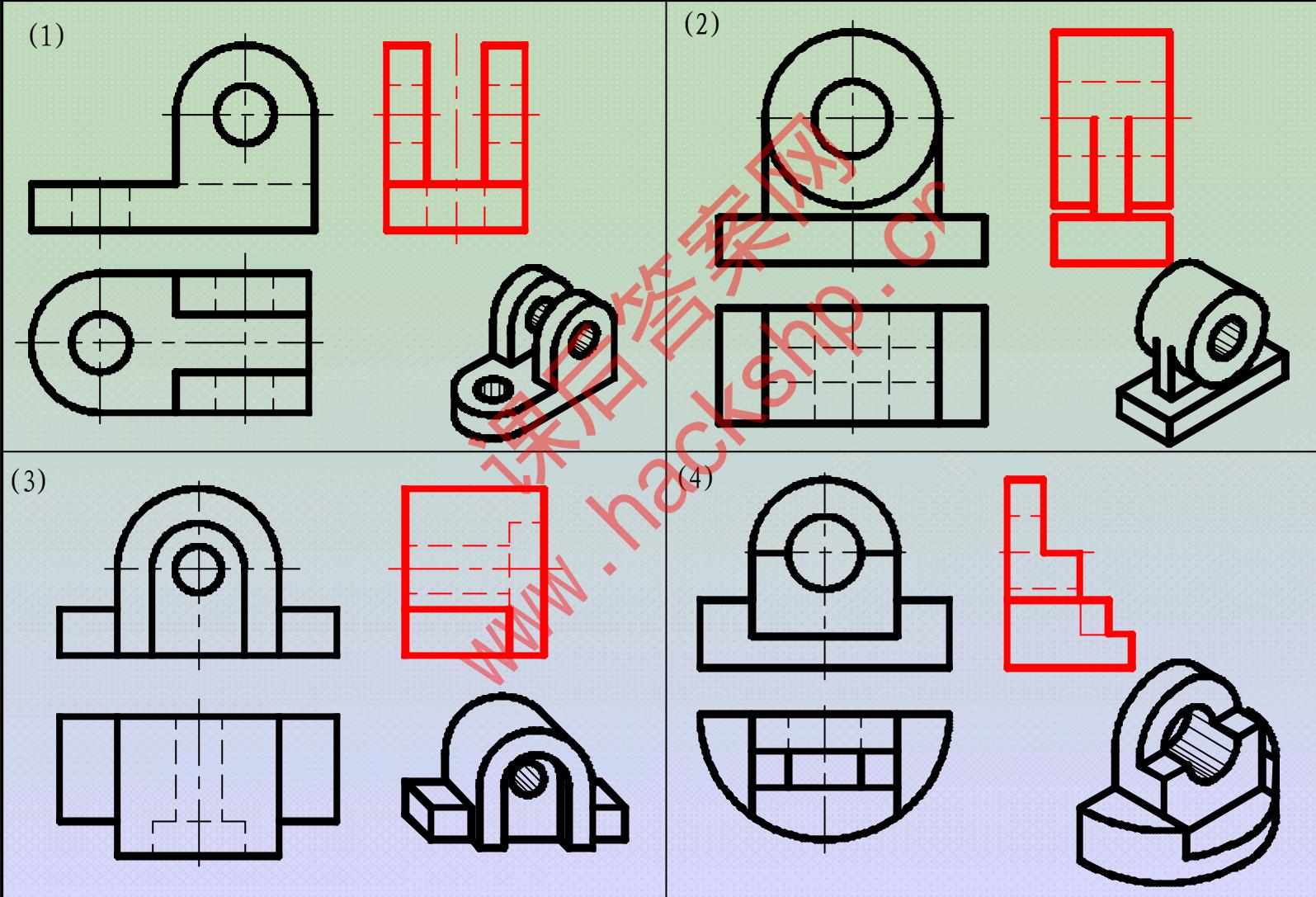
(2)



6-5 根据组合体的两投影补第三投影

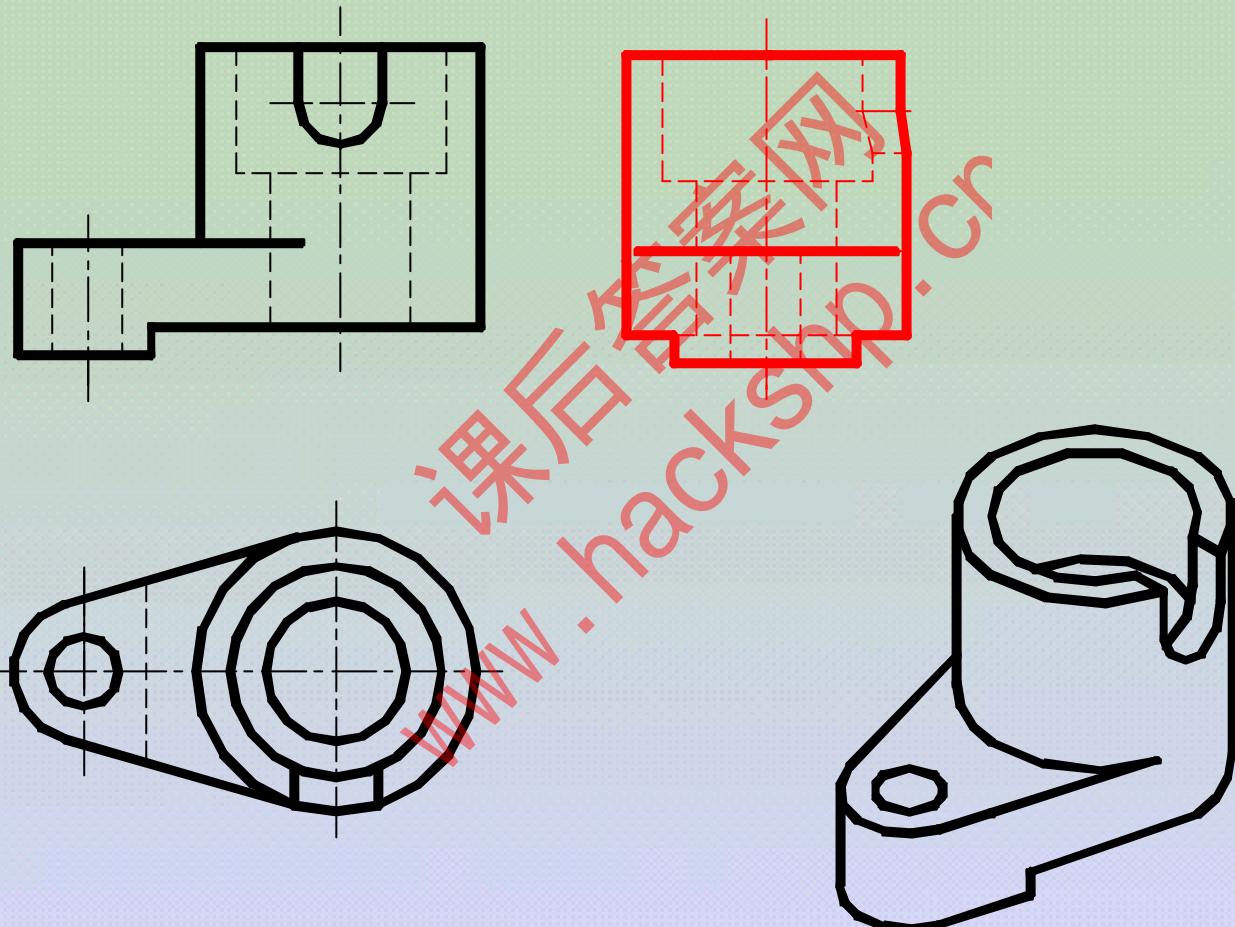


6-6 根据组合体的两投影补画第三投影

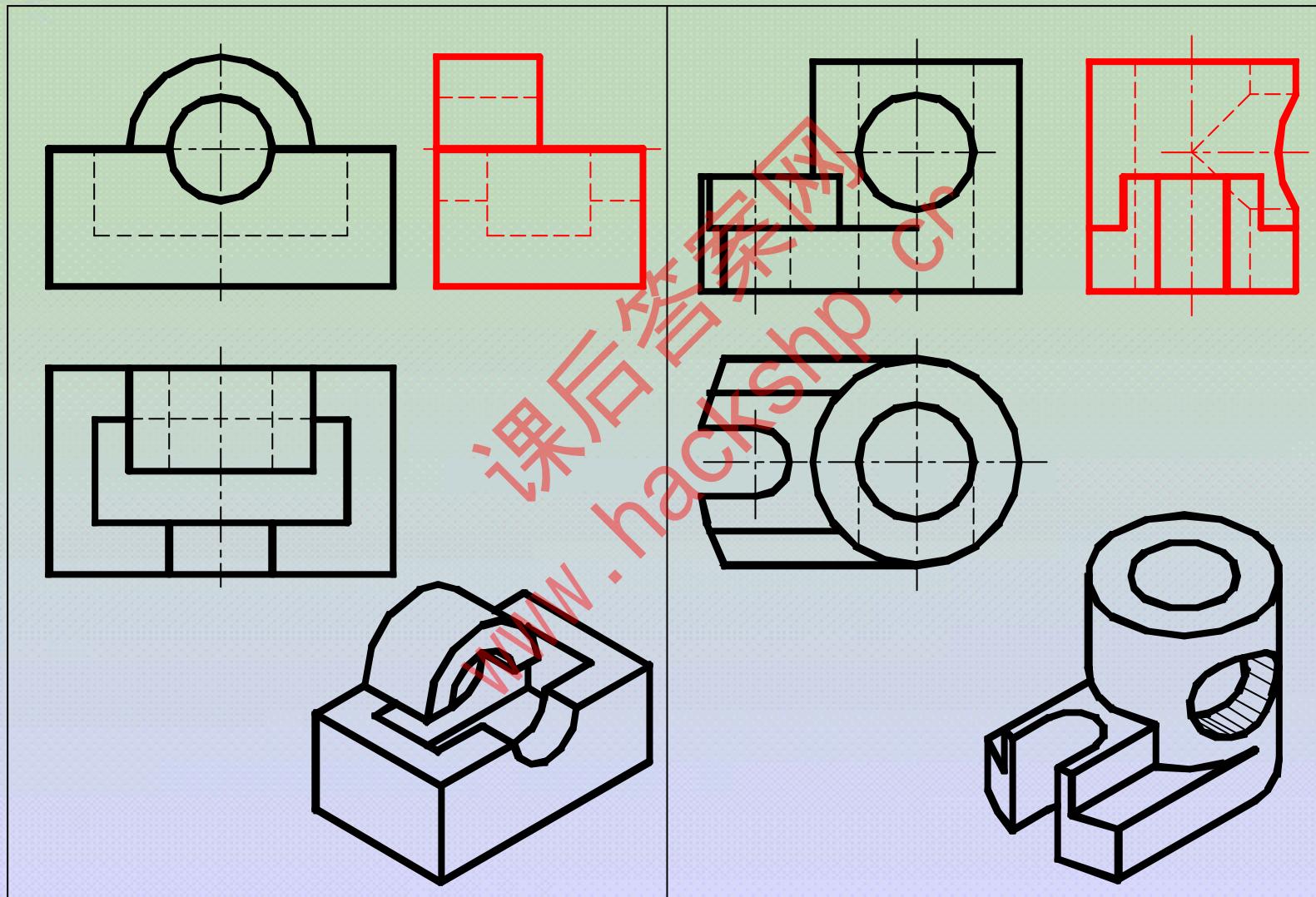


6-7 根据组合体的两投影补第三投影

(1)

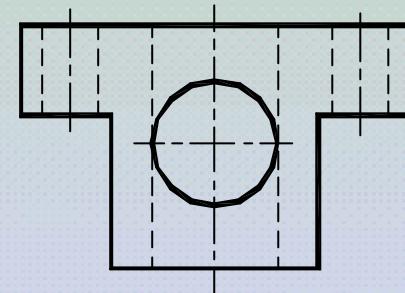
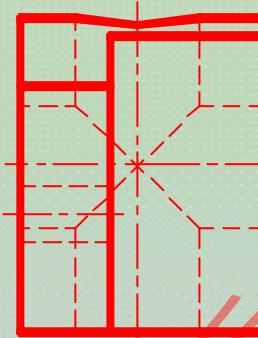
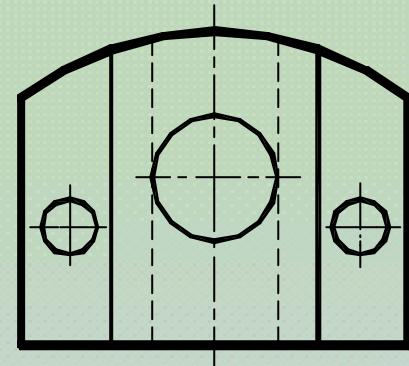


6-8 根据组合体的两投影补画第三投影

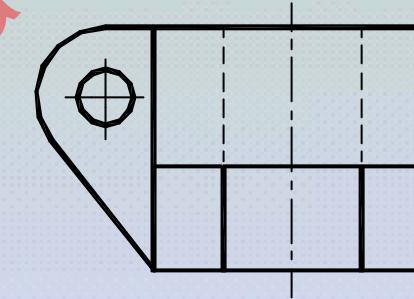
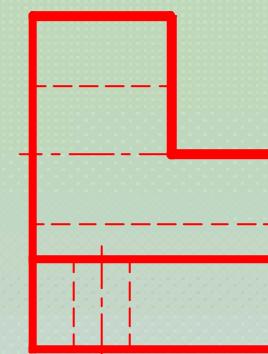
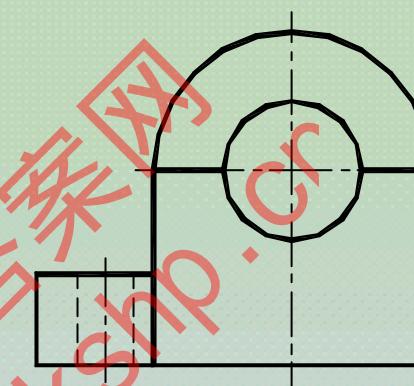


6-9 根据组合体的两投影补画第三投影

(1)

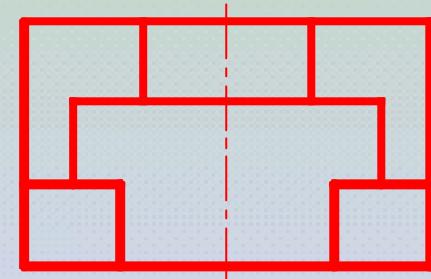
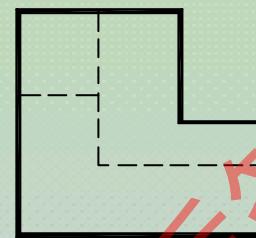
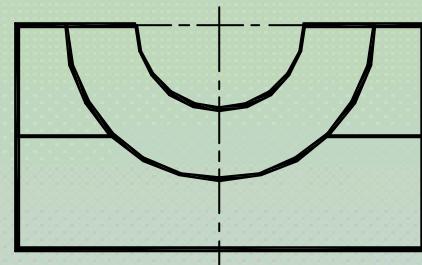


(2)

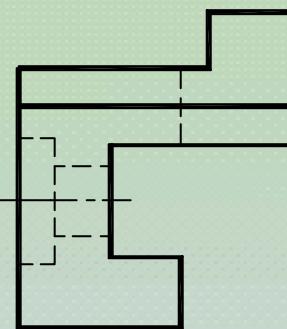
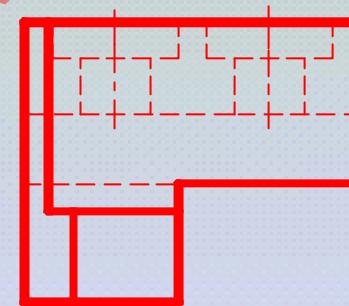
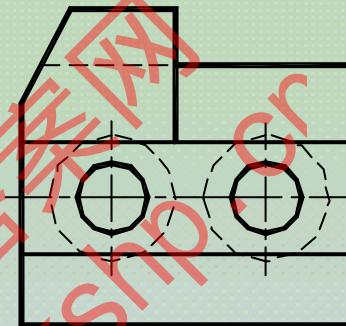


6-10 根据组合体的两投影补画第三投影

(1)

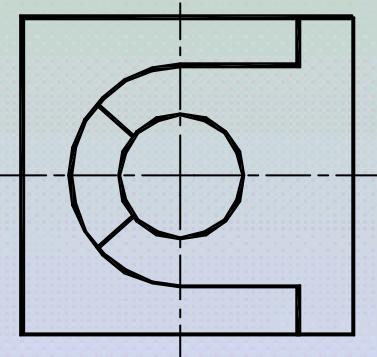
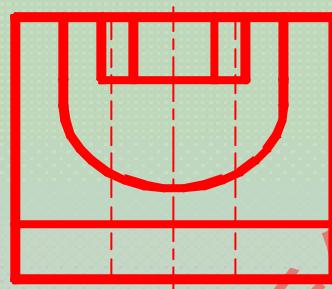
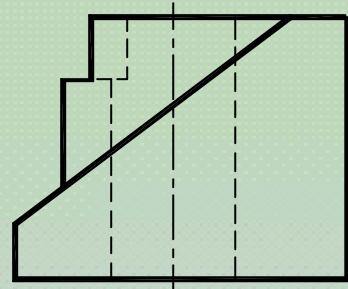


(2)

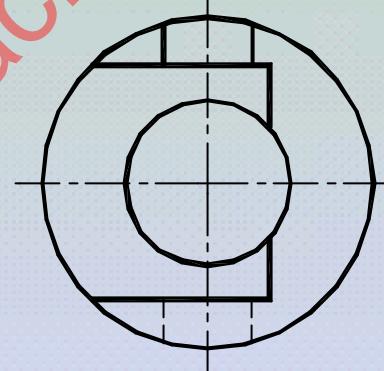
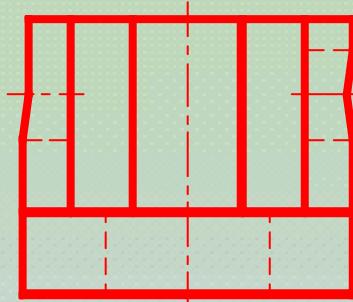
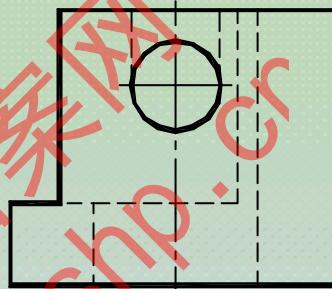


6-11 根据组合体的两投影补画第三投影

(1)



(2)



习题 7-1

习题 7-4

习题 7-7

习题 7-10

习题 7-13

习题 7-16

习题 7-19

习题 7-20(3)

习题 7-2

习题 7-5

习题 7-8

习题 7-11

习题 7-14

习题 7-17

习题 7-20(1)

习题 7-20(4)

习题 7-3

习题 7-6

习题 7-9

习题 7-12

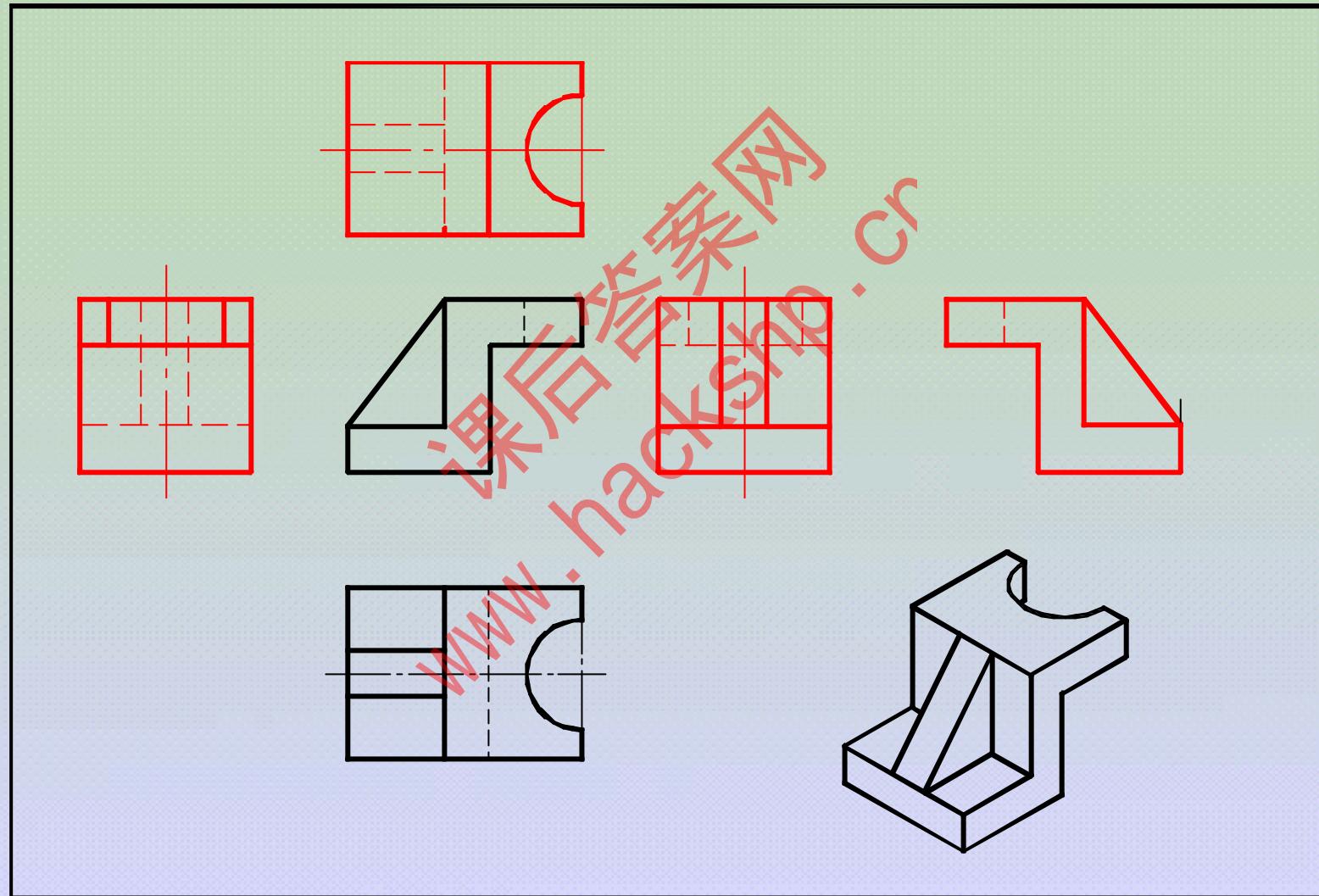
习题 7-15

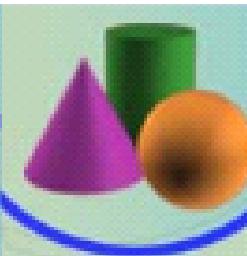
习题 7-18

习题 7-20(2)

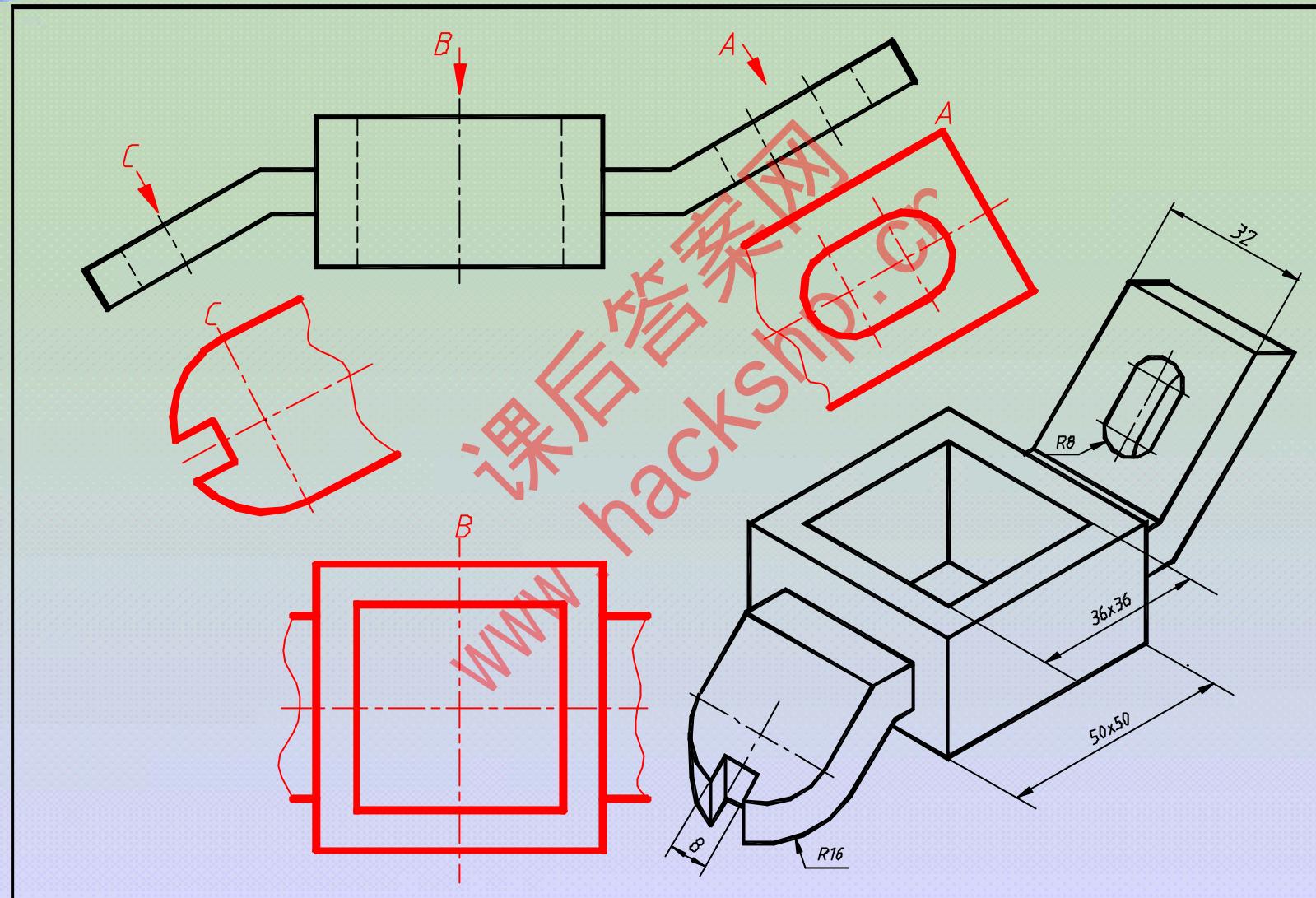
返
回

7-1 补全其它四个基本视图，保留图中虚线。

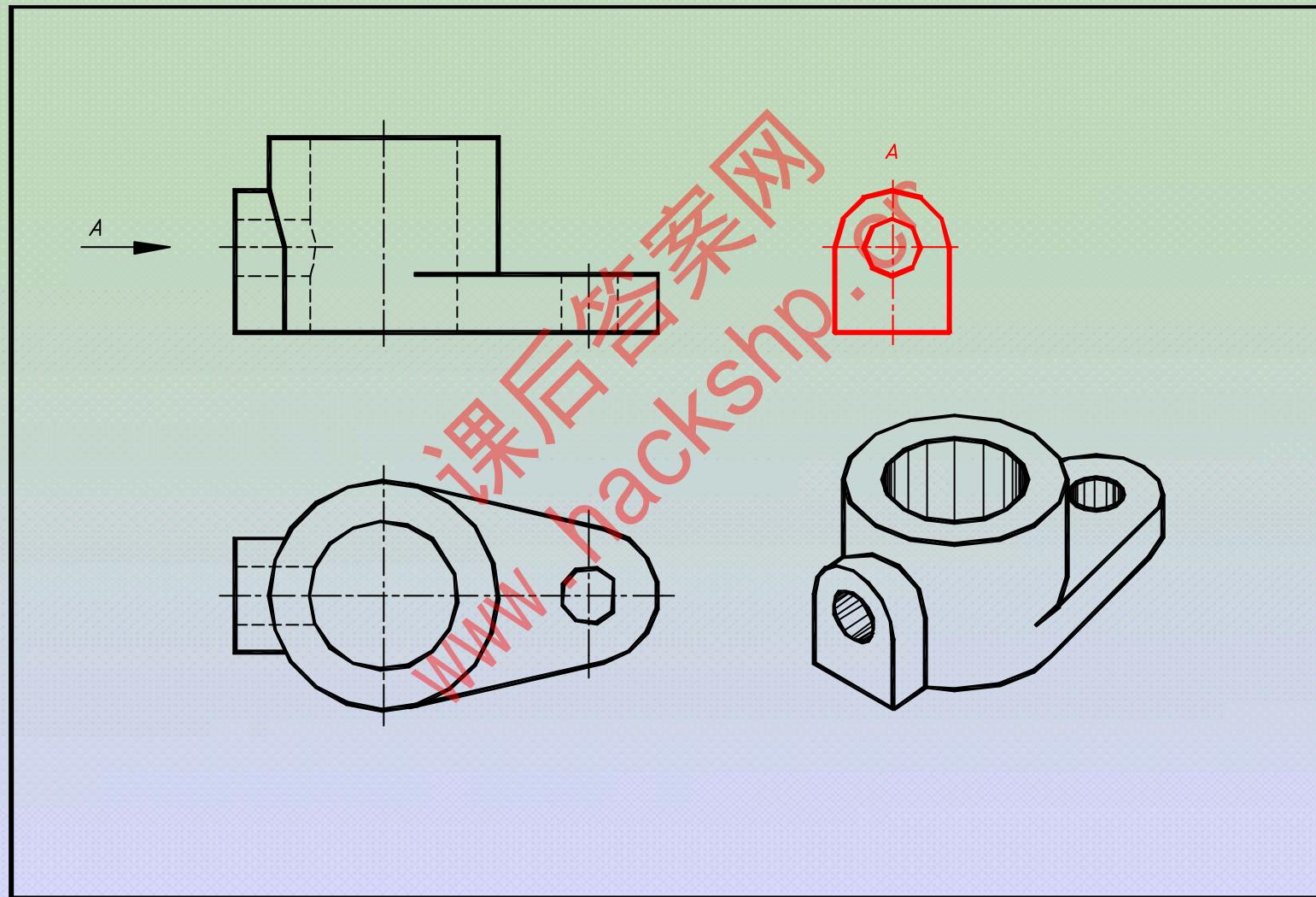




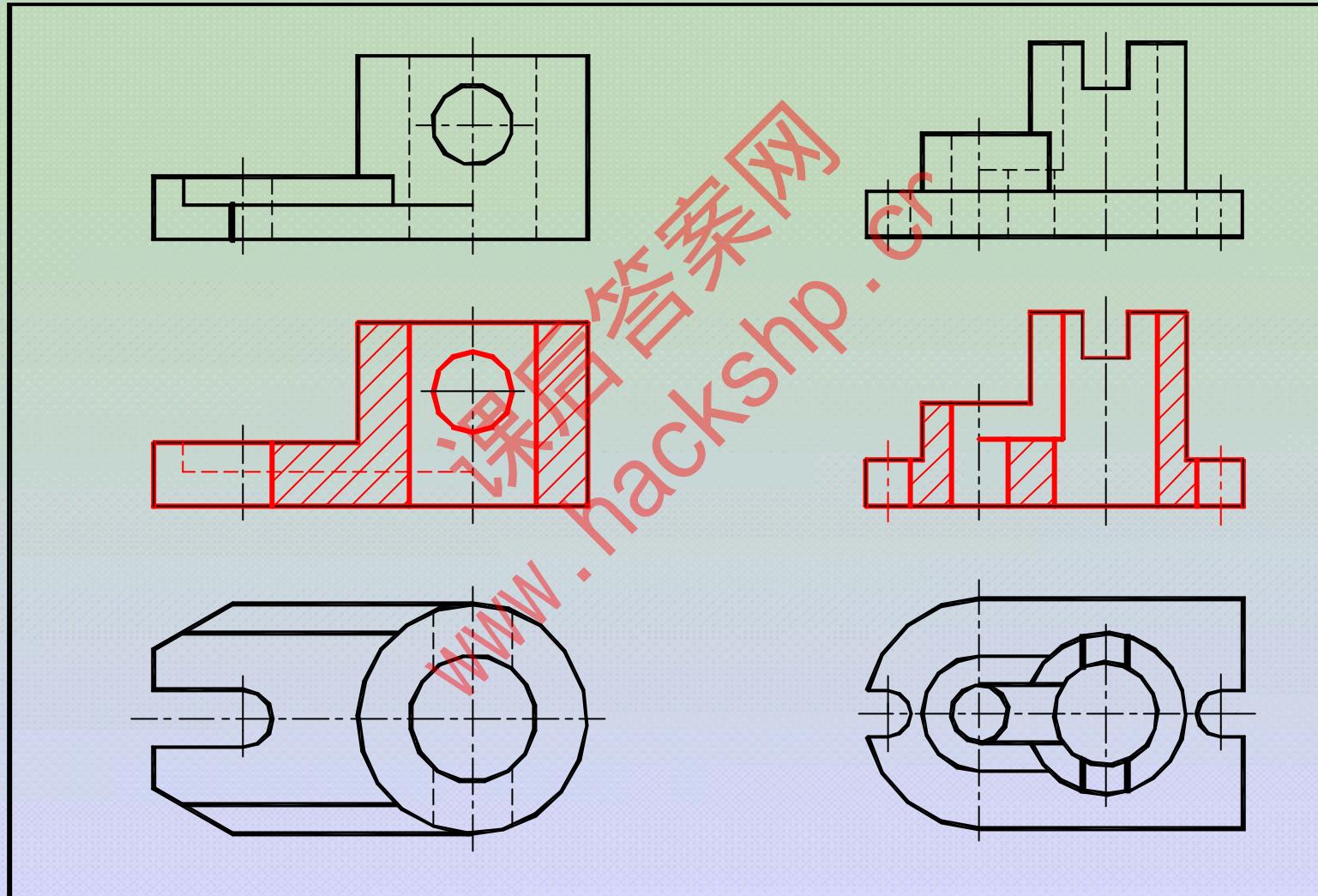
7-2 根据轴测图和主视图, 画出必要的局部视图和斜视图。



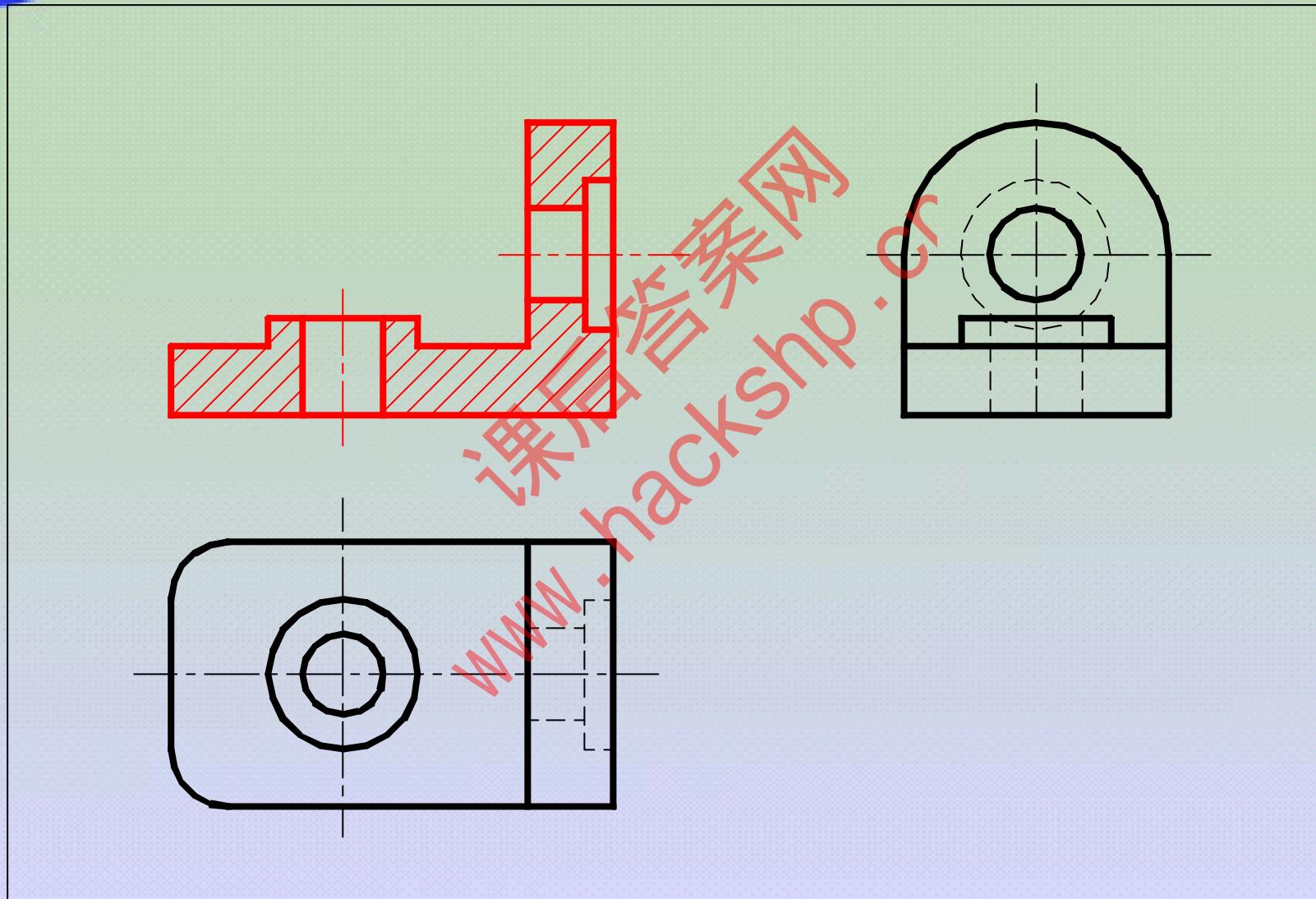
7-3 画出A向局部视图



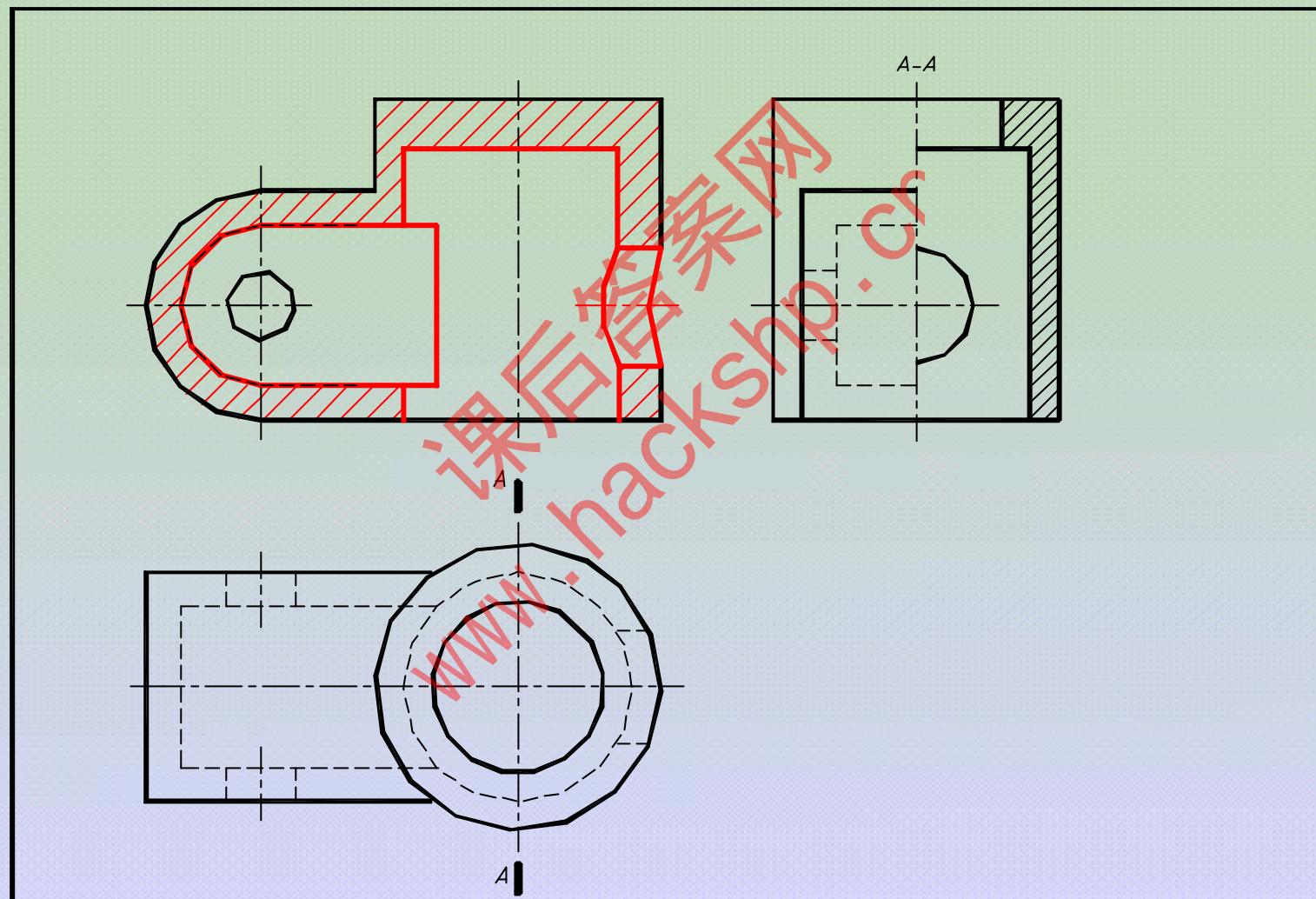
7-4 在指定位置上, 把主视图改画为全剖视图



7-5 画出全剖的主视图。

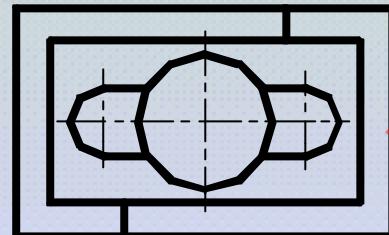
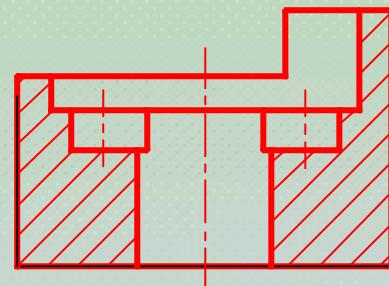


7-6 作出全剖的主视图

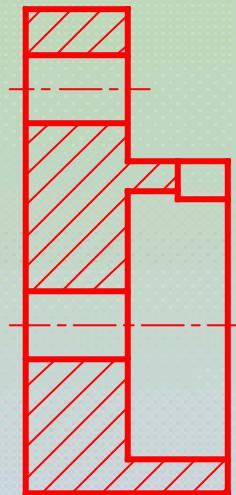
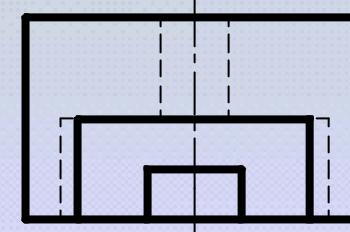
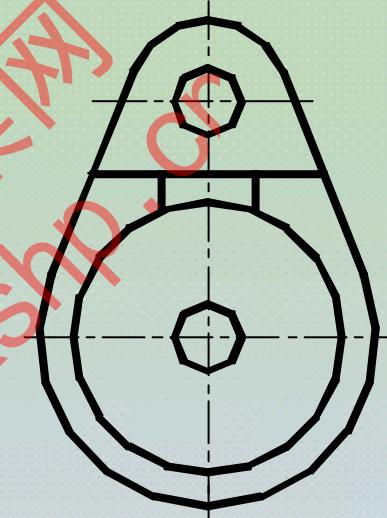


7-7 将机件按要求作剖视

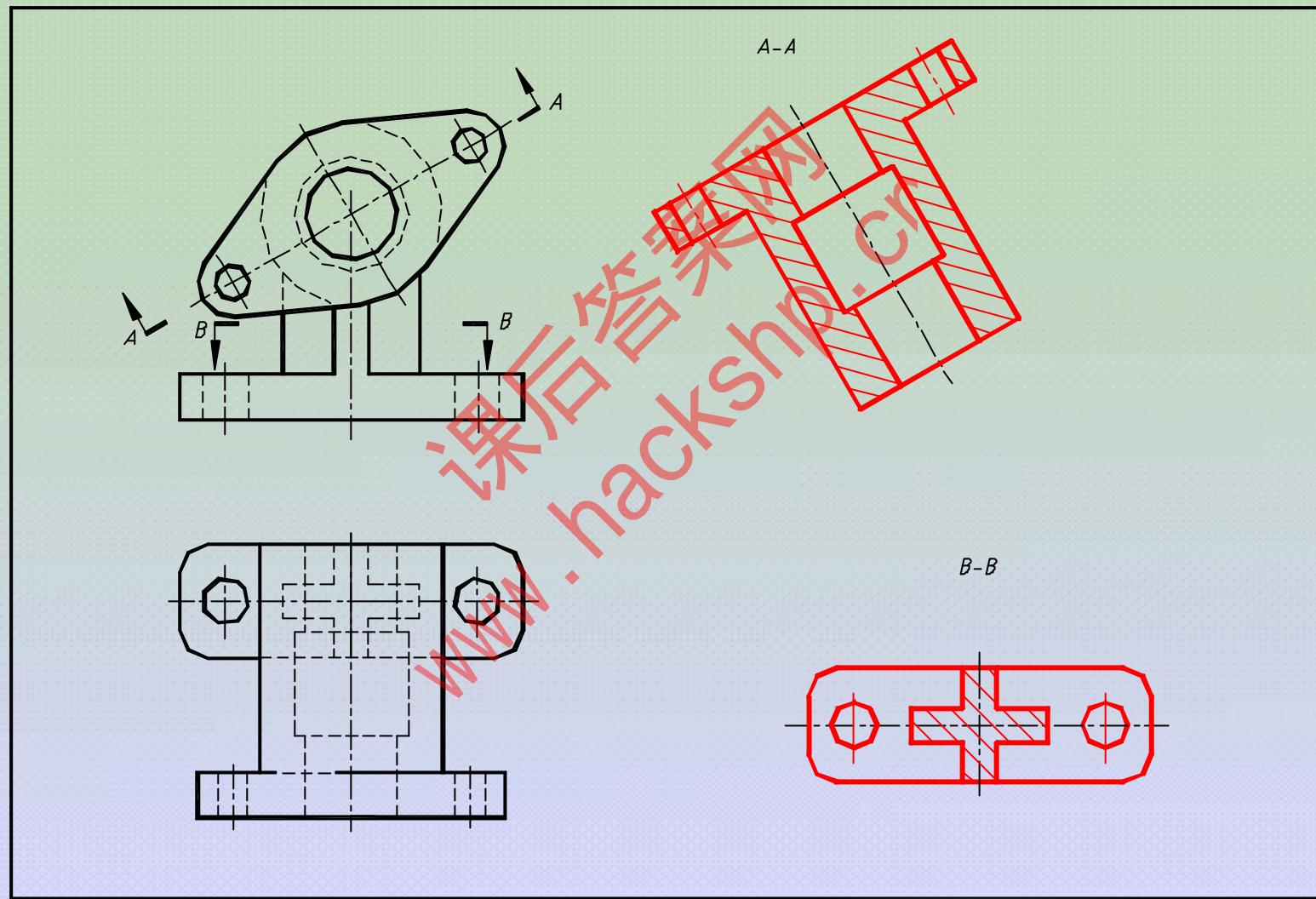
(1) 在主视图上取全剖



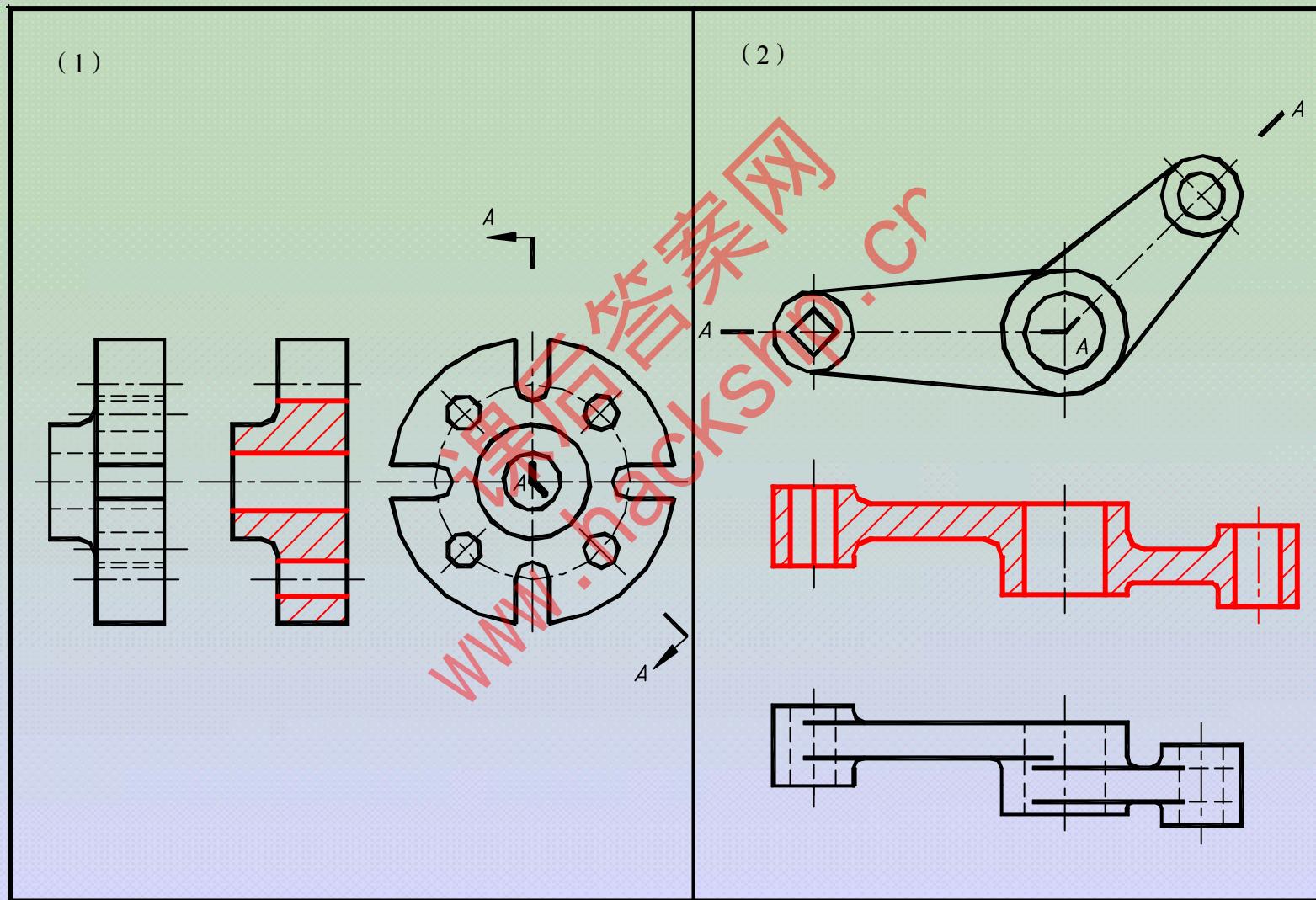
(2) 在左视图上取全剖



7-8 画出A-A及B-B剖视图

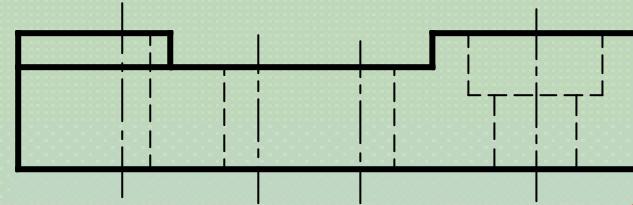


7-9 在指定位置上作旋转全剖视图

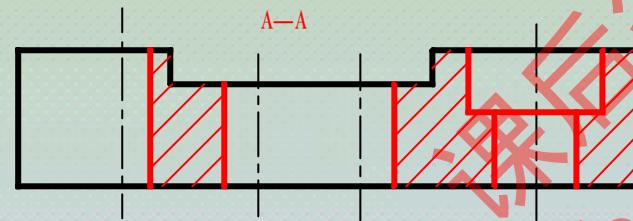


7-10 在指定位置用阶梯剖作出全剖视图

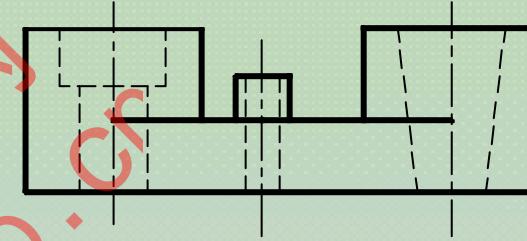
(1)



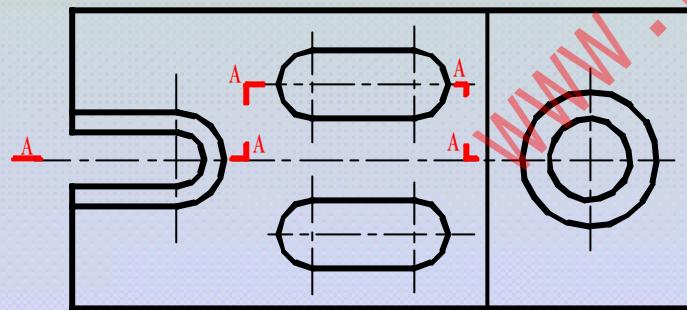
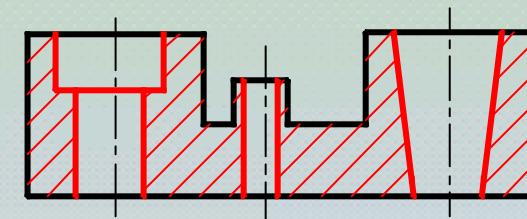
A-A



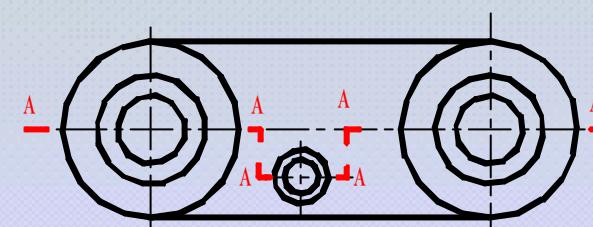
(2)



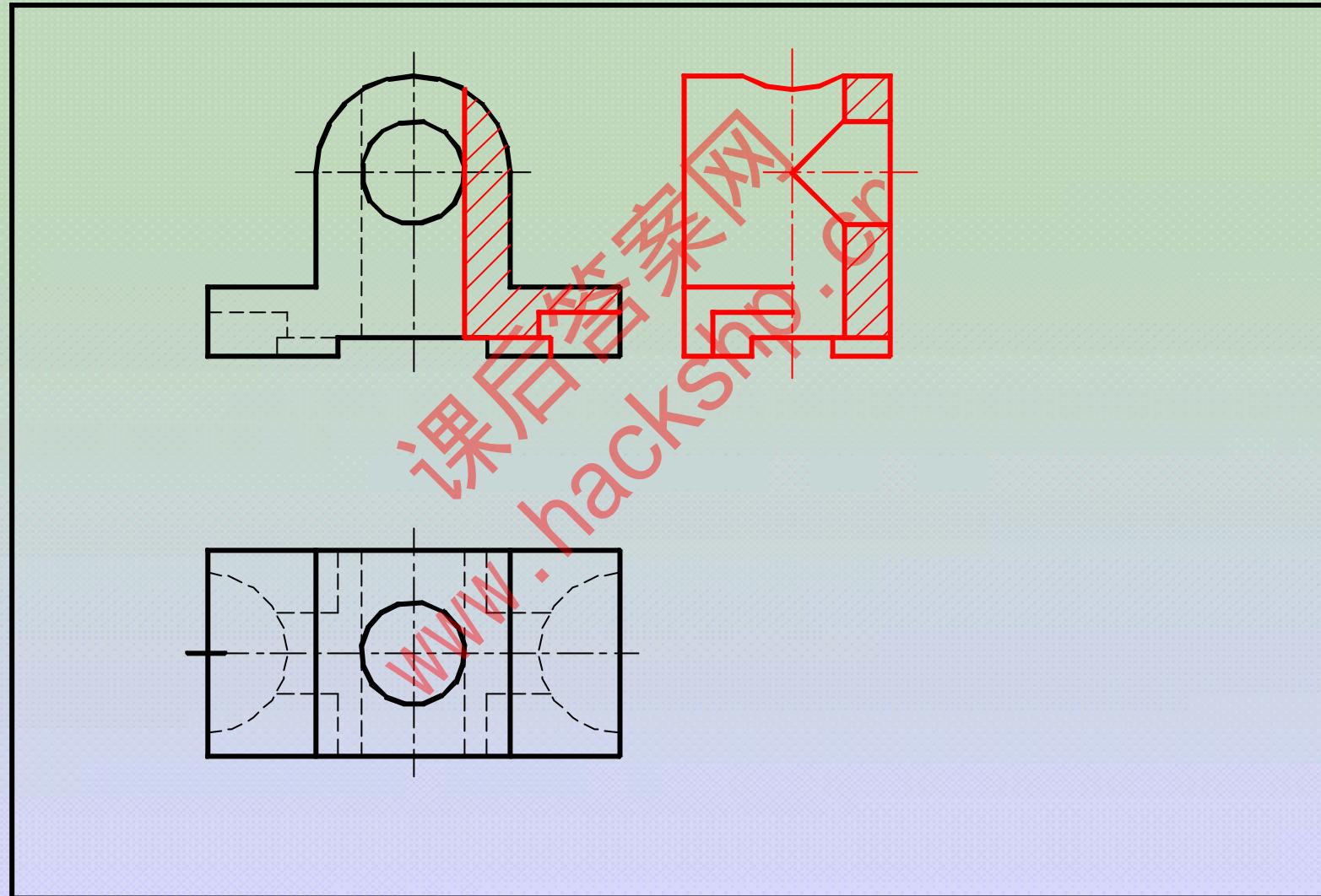
A-A



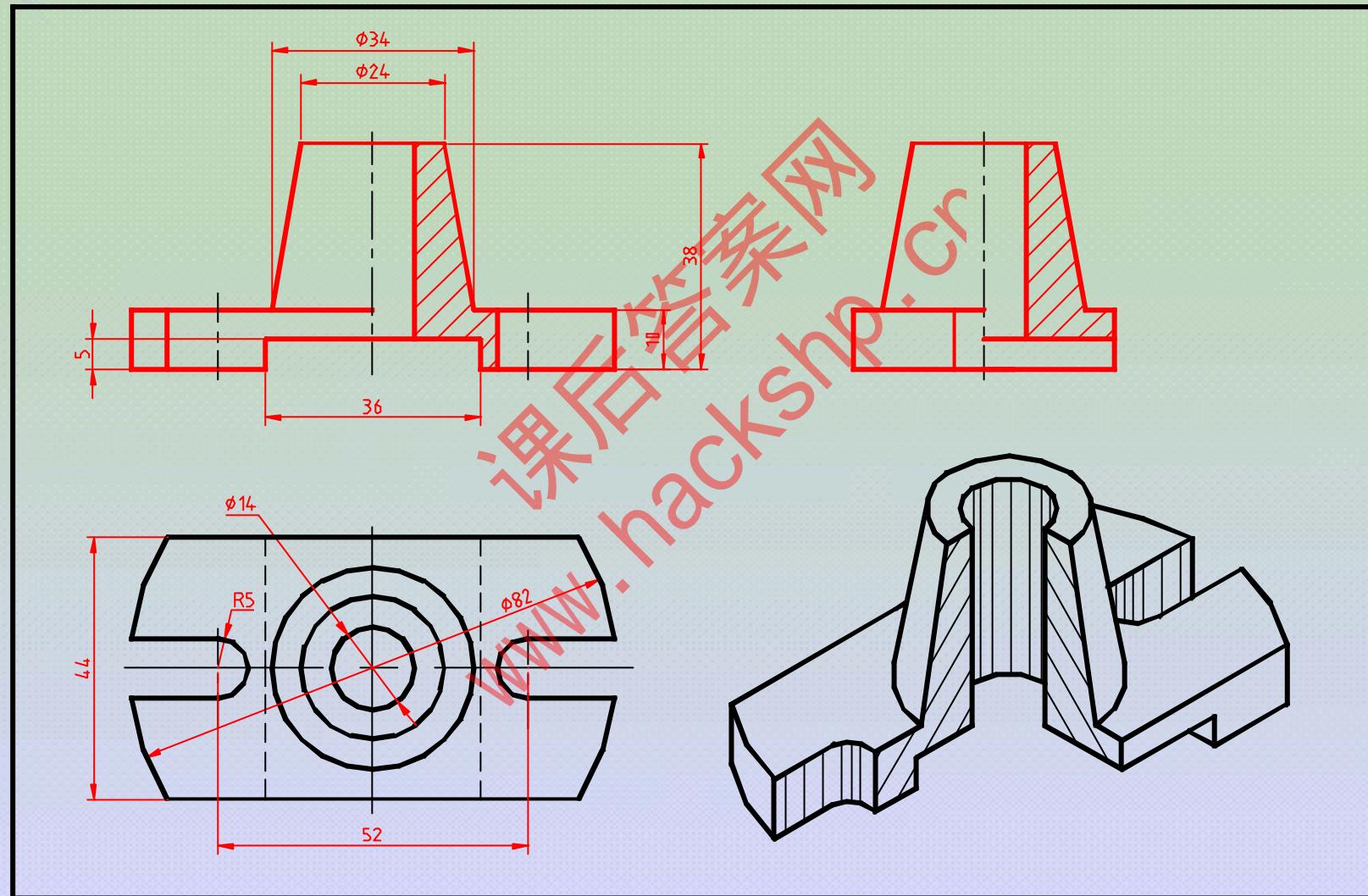
A



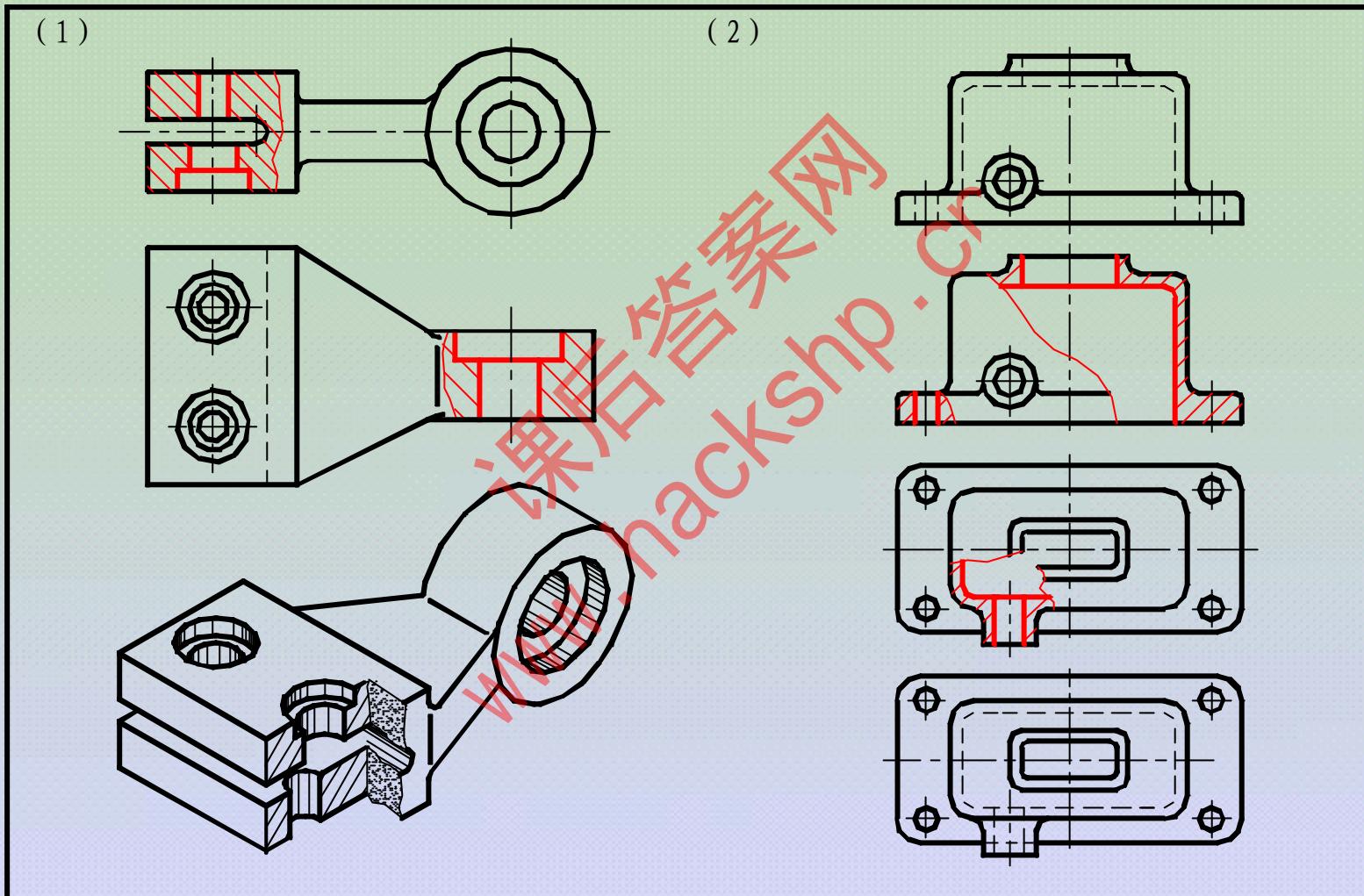
7-11 看懂主、俯视图，补出取半剖视图的左视图，并在主视图上取半剖视图，把不要的线打上



7-12 根据轴测图把主、左视图画成半剖视图，并标注尺寸

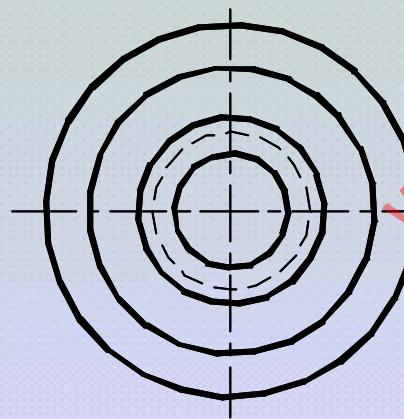
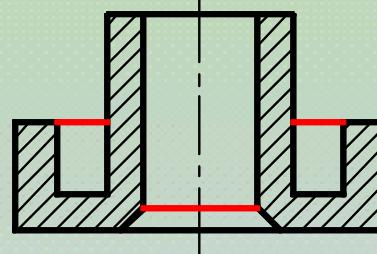


7-13 在视图的适当位置上取局部剖视图

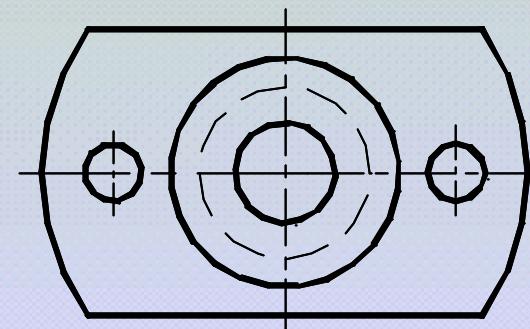
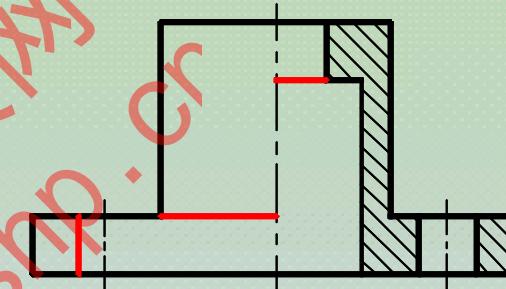


7-14 根据剖视规则, 画出图中所漏的可见轮廓线

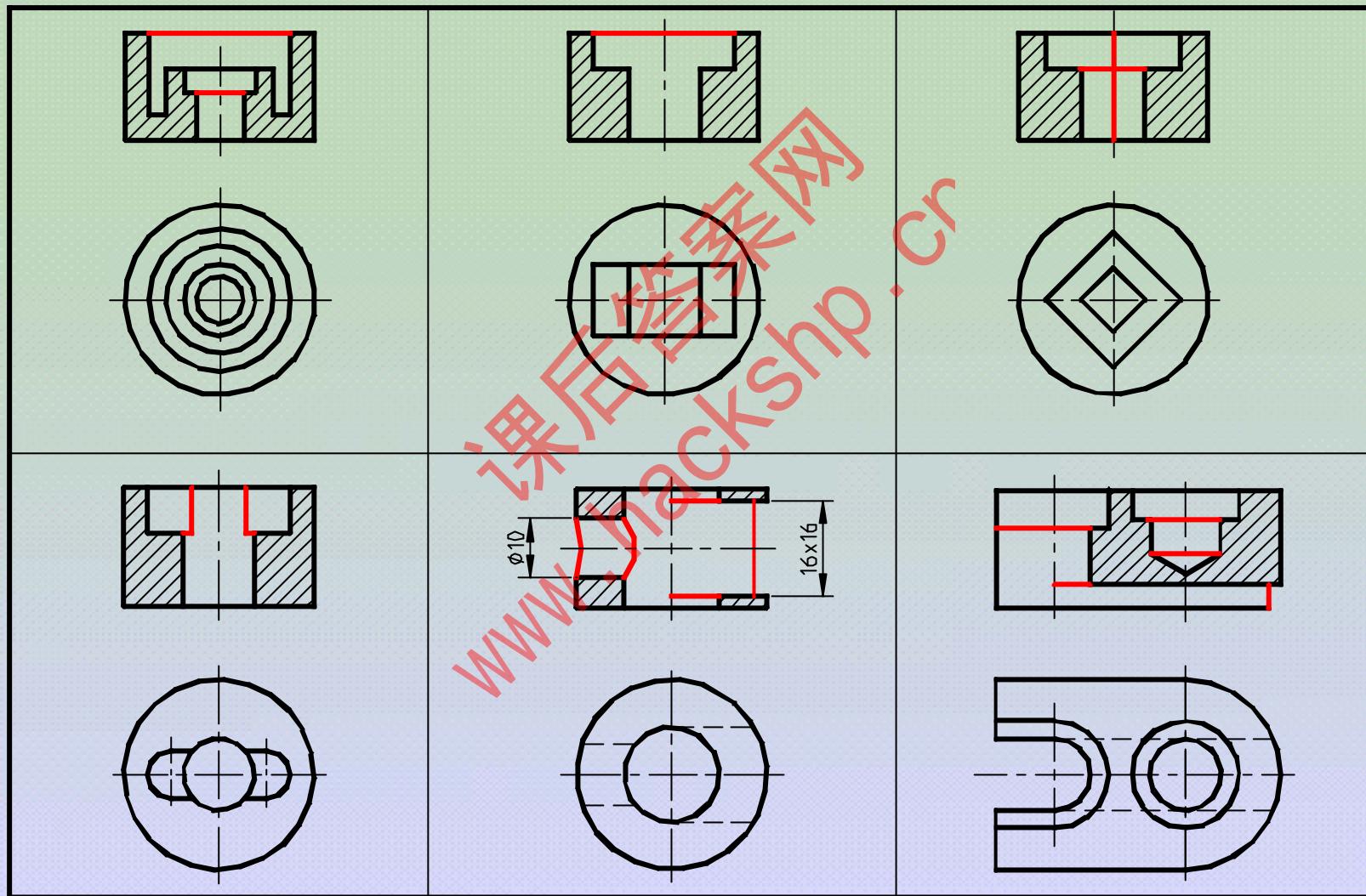
(1)



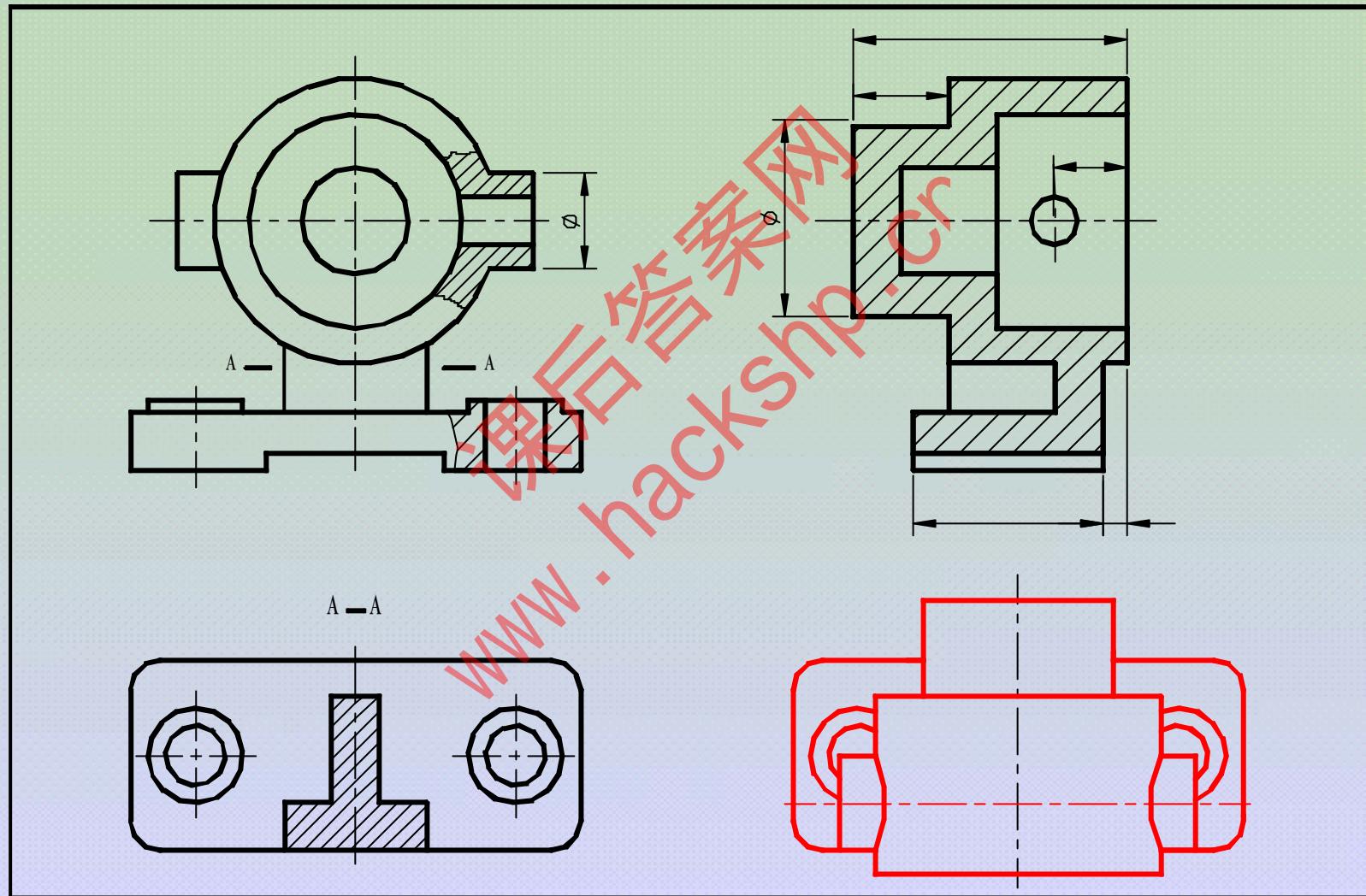
(2)



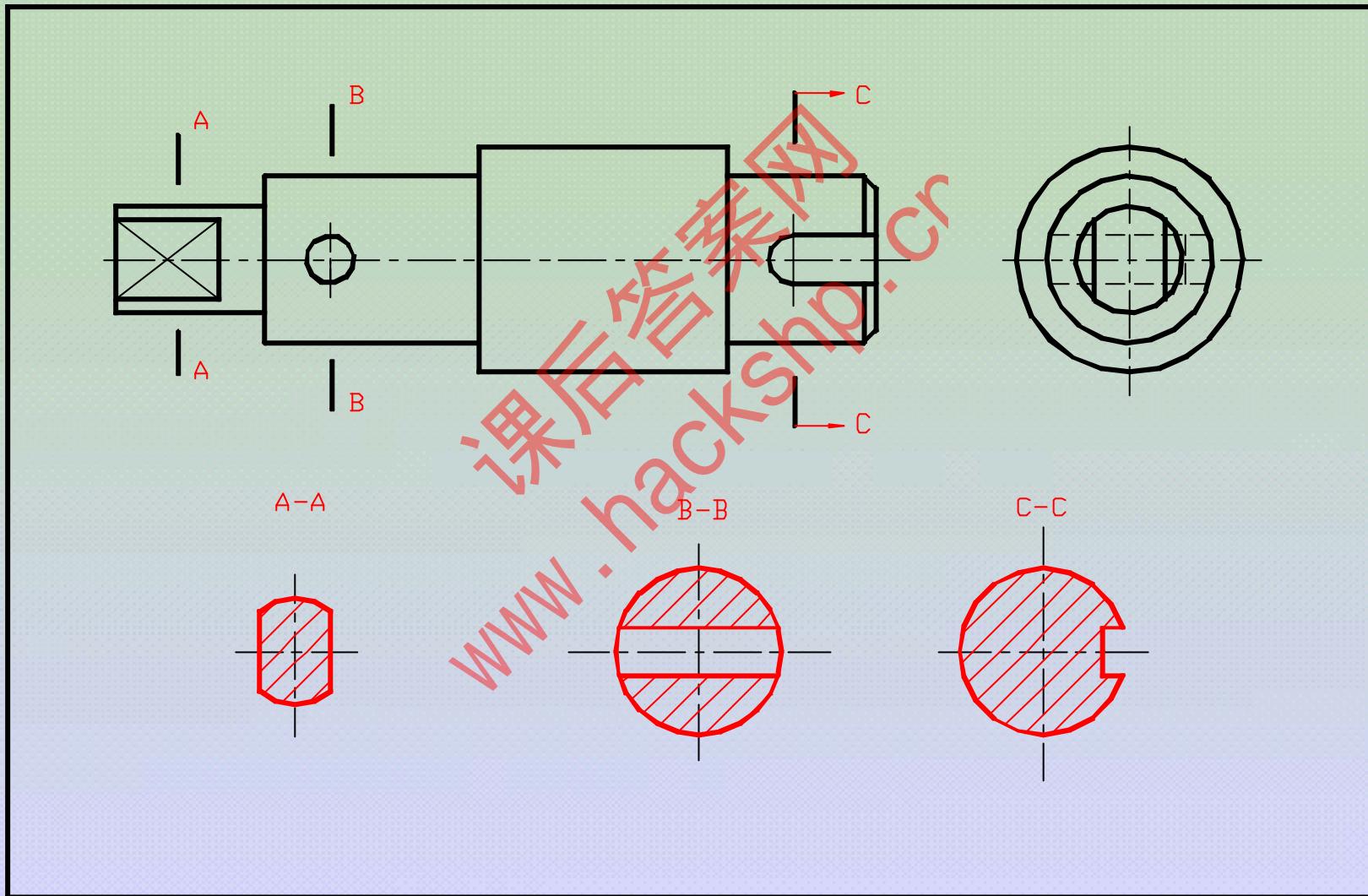
7-15 补画出剖视图中所漏的可见轮廓线



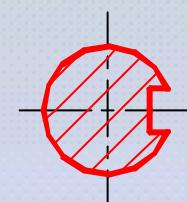
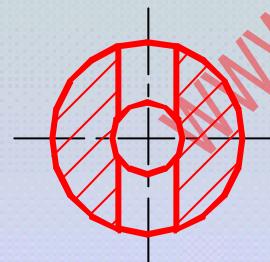
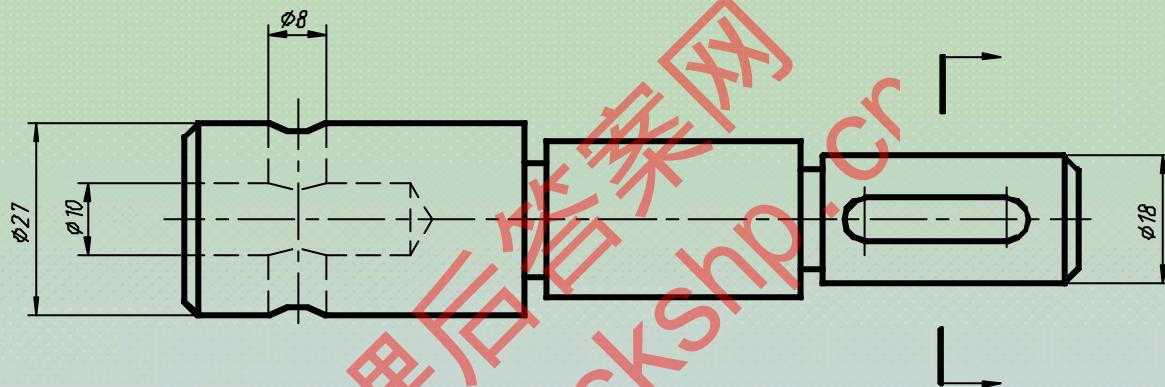
7-16 根据给出的剖视图, 画出俯视图的外形图



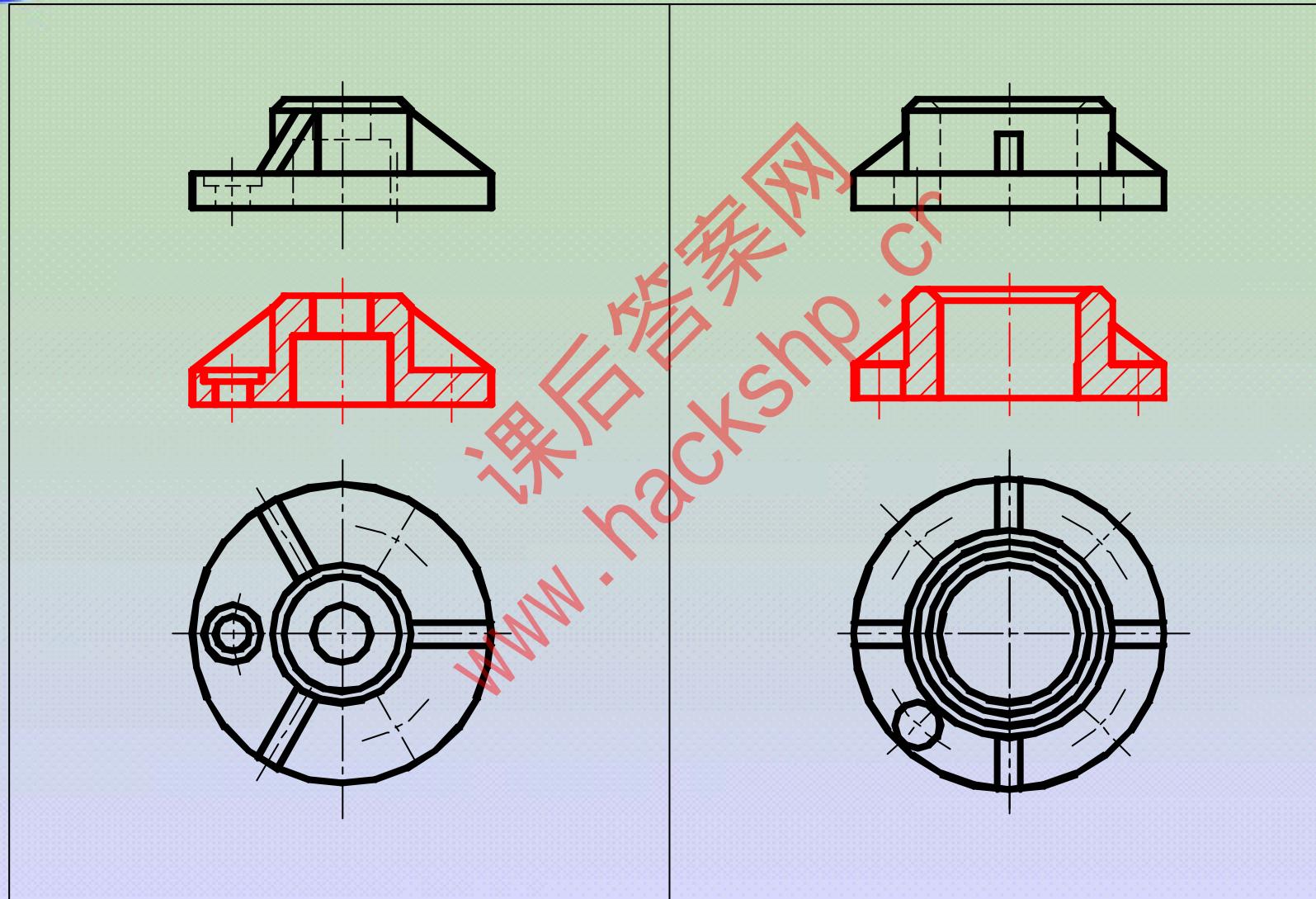
7-17 在指定的位置上, 画出轴移出断面



7-18 画出轴上指定位置的移出断面，键槽深度为3.5毫米

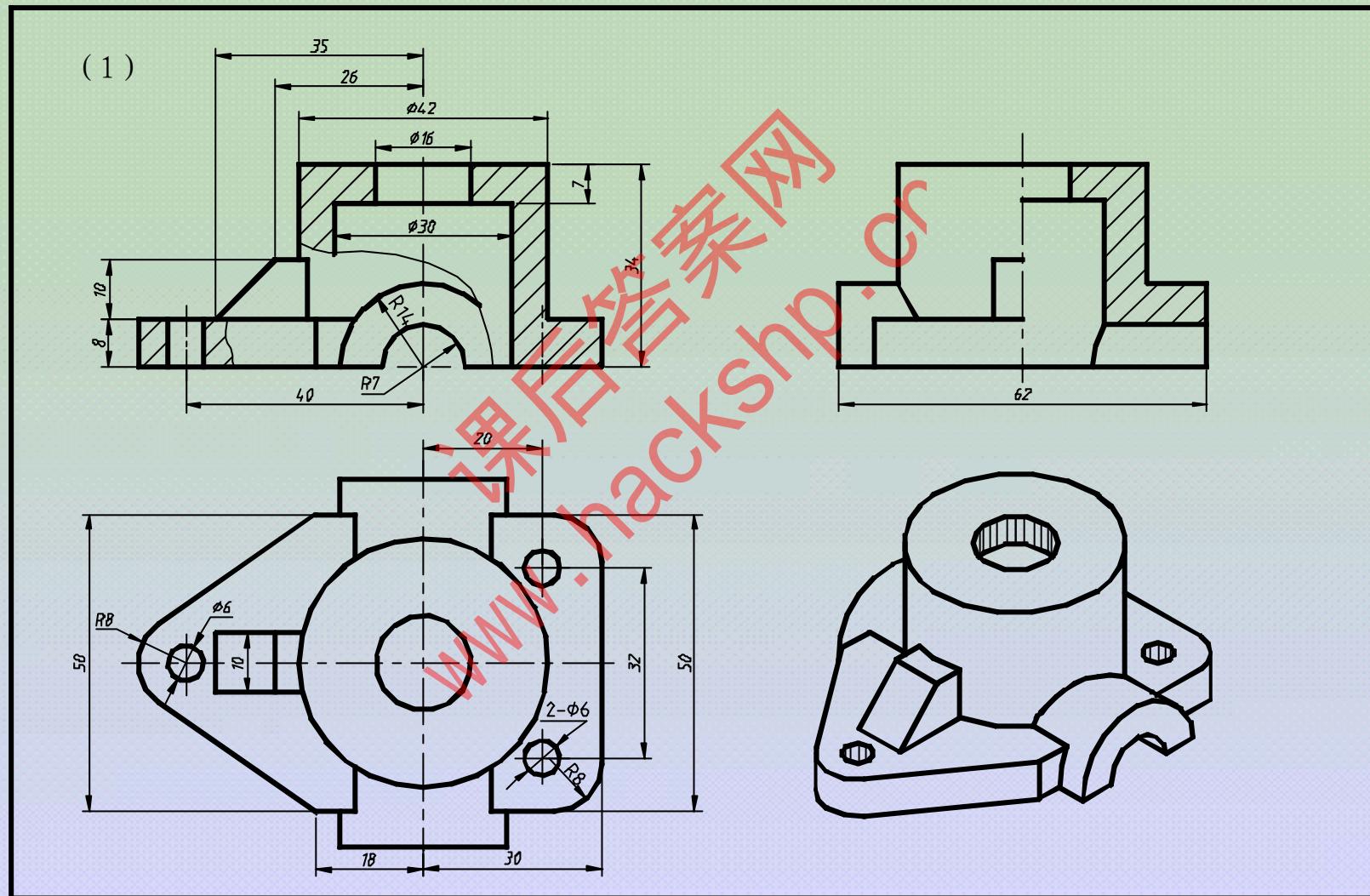


7-19 在给定位置上画出全剖主视图



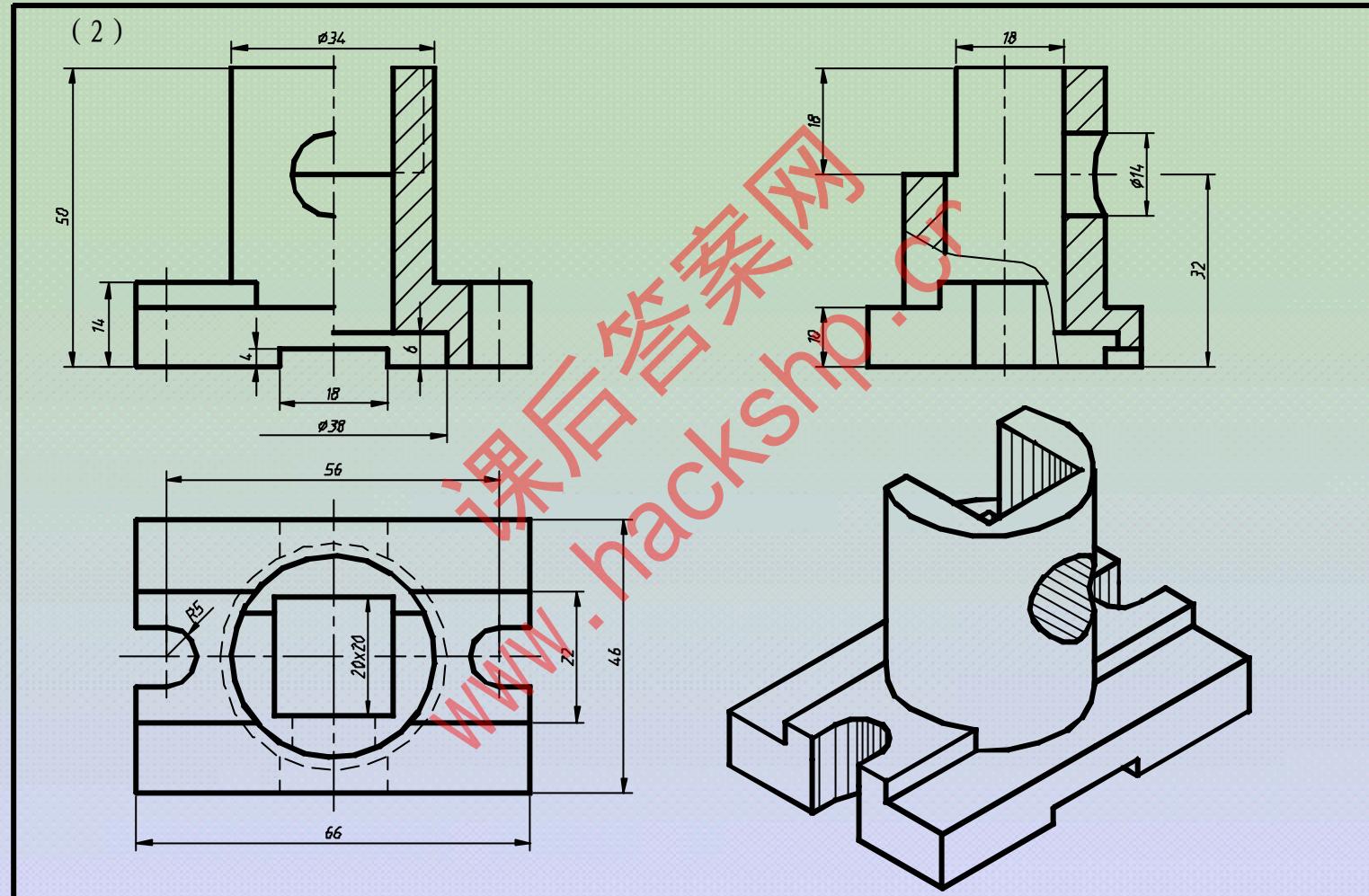
第七章 机件的表达方法

7-20 选择适当的表达方案，在A3图纸上用2: 1比例画出主、俯、左三视图，并标注尺寸

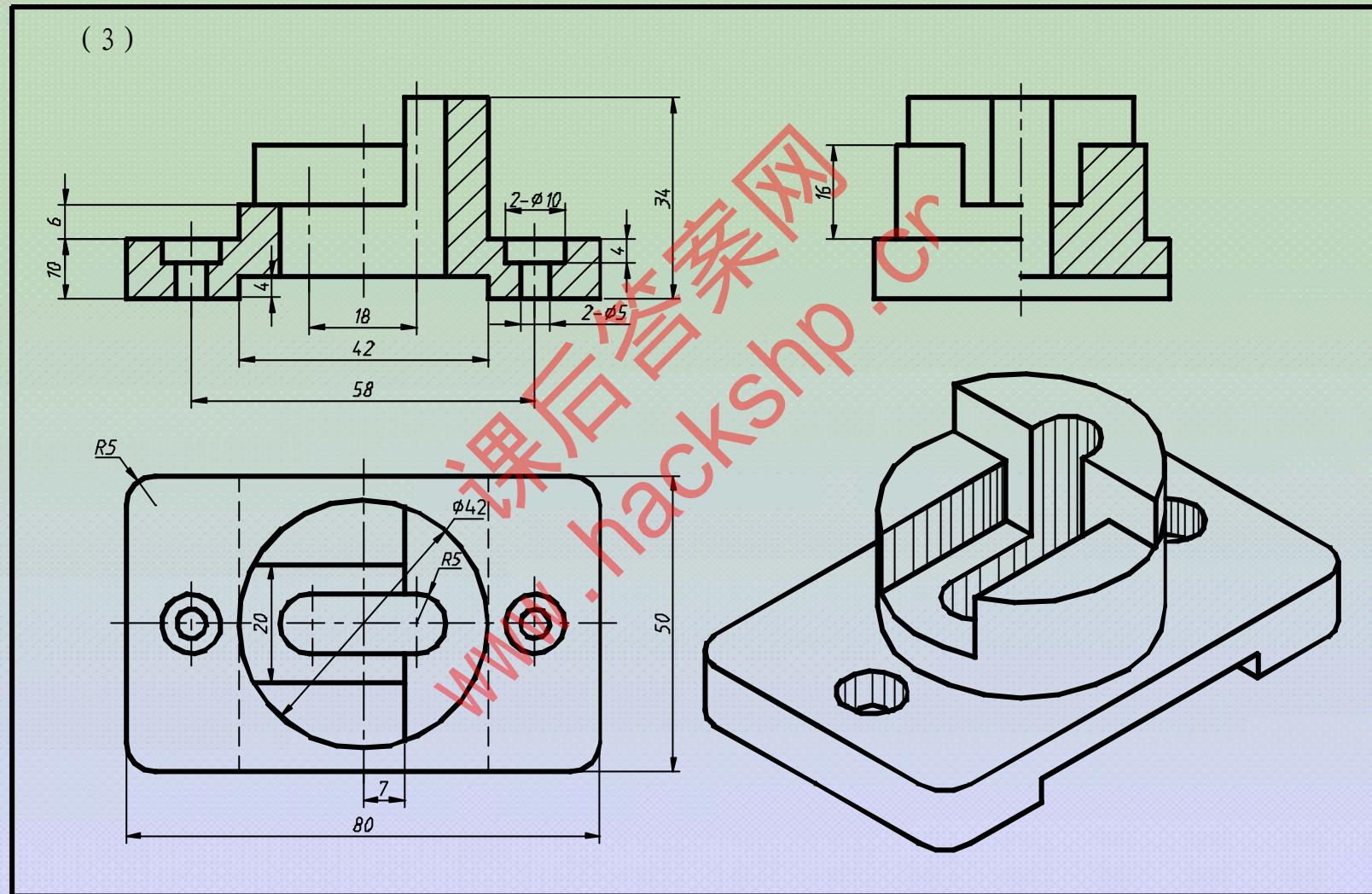


第七章 机件的表达方法

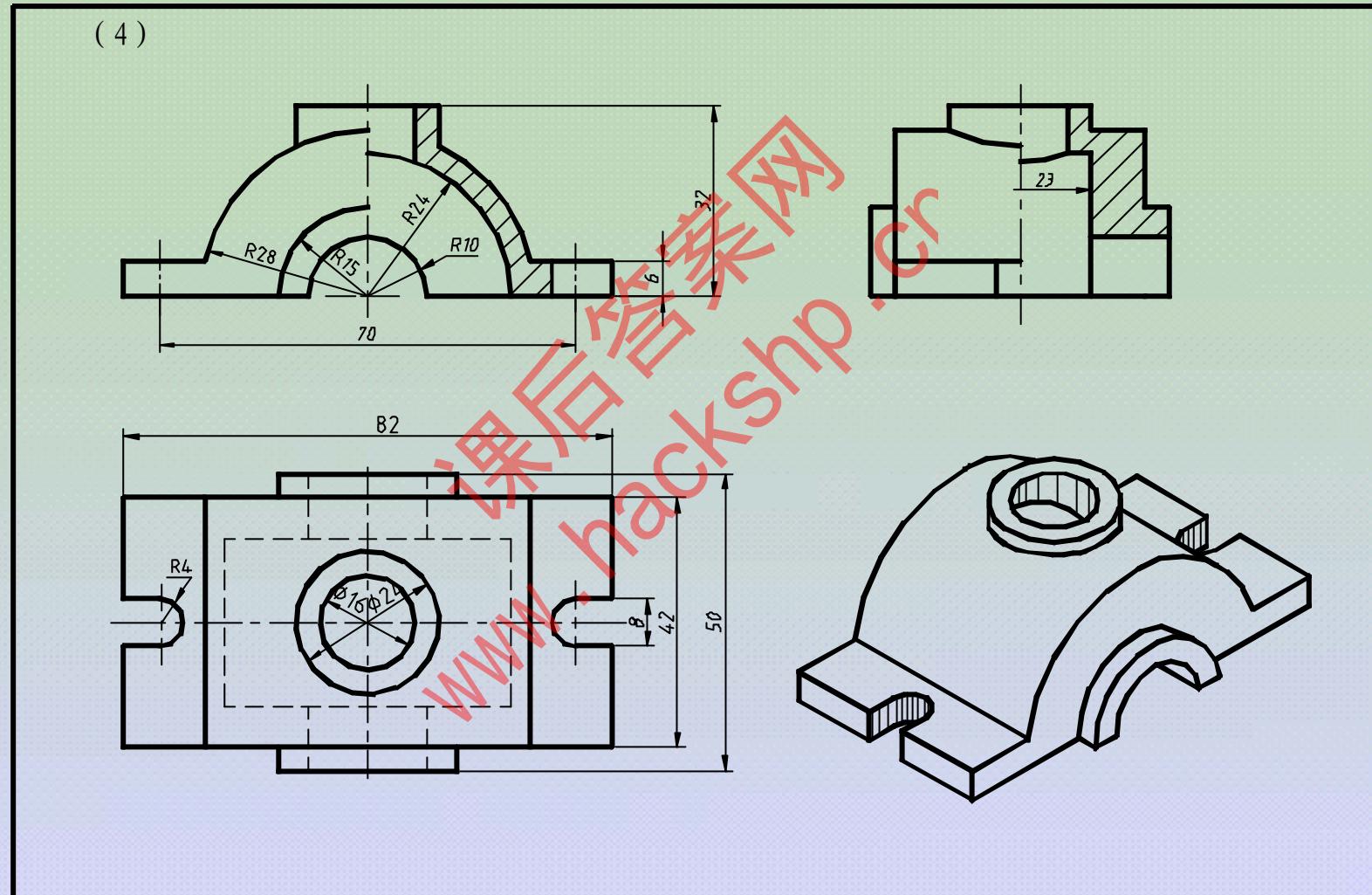
7-20 选择适当的表达方案，在A3图纸上用2: 1比例画出主、俯、左三视图，并标注尺寸

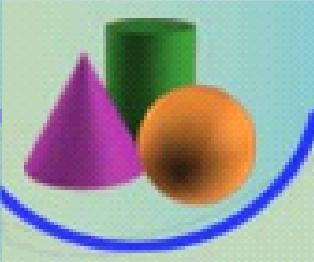


7-20 选择适当的表达方案，在A3图纸上用2: 1比例画出主、俯、左三视图，并标注尺寸



7-20 选择适当的表达方案，在A3图纸上用2: 1比例画出主、俯、左三视图，并标注尺寸





第八章 标准件与常用件

习题 8-1

习题 8-2

习题 8-3

习题 8-4

习题 8-5(1)

习题 8-5(2)

习题 8-6

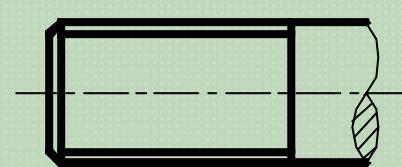
习题 8-7

返回

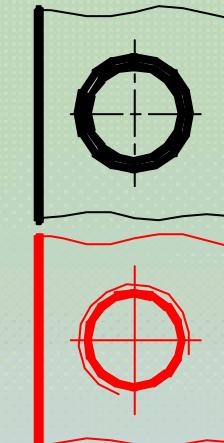
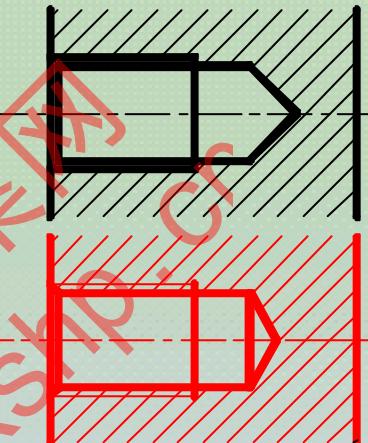
第八章 标准件与常用件

8-1分析图中的错误，在指定位置画出正确图形。

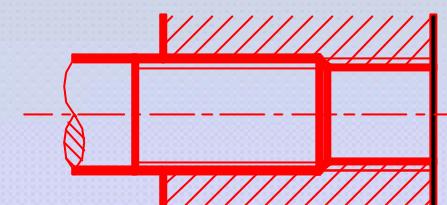
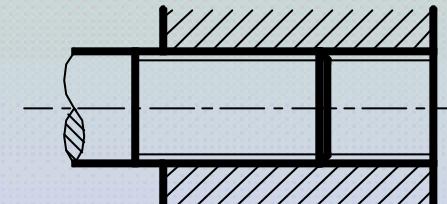
(1) 外螺纹



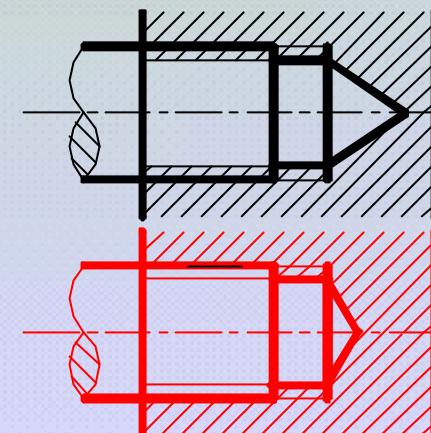
(2) 内螺纹



(3) 外螺纹连接



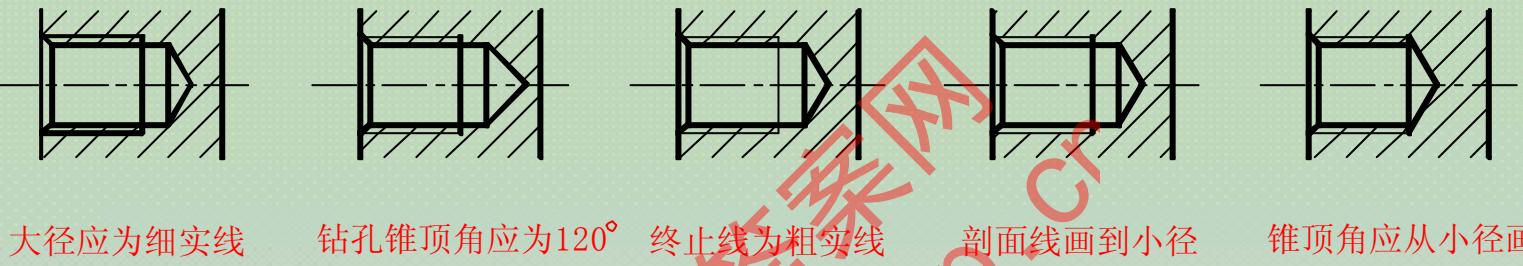
(4) 螺纹连接



第八章 标准件与常用件

8-2 不通孔螺纹画法及螺纹规定代号

在下面说明不通孔螺纹画法的错误



说明螺纹规定代号的意义，并逐项填入表内

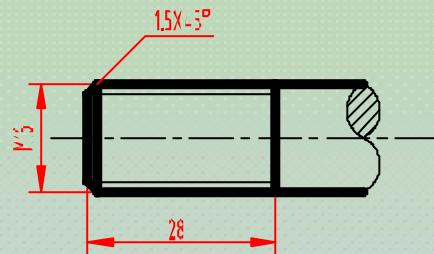
代号	意义	螺纹种类	公称直径	导程	螺距	线数	旋向
M10	粗牙普通螺纹	10		1.5	1.5	1	右
M20LH	粗牙普通螺纹	20		2.5	2.5	1	左
M16×1.5	细牙普通螺纹	16		1.5	1.5	1	右
Tr44×14(P7)	梯形螺纹	44		14	7	2	右
G1/2-LH	非螺纹密封的圆柱管螺纹	大径:21		1.8	1.8	1	左



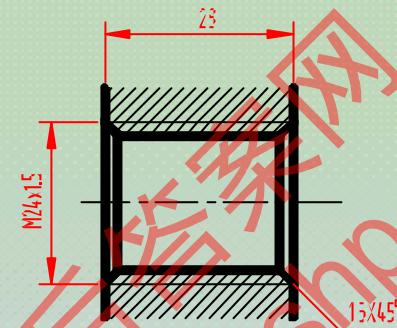
第八章 标准件与常用件

8-3 在图中标出螺纹部分的尺寸

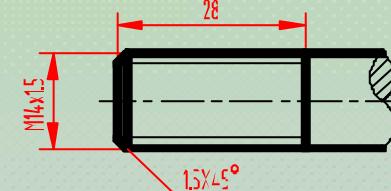
(1) 普通螺纹, 公称直径16毫米, 螺距2毫米, 右旋, 倒角 $1.5 \times 45^\circ$ 。



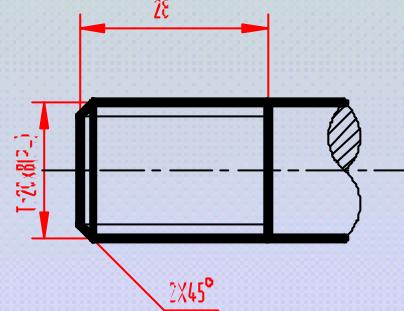
(2) 普通螺纹, 公称直径24毫米, 螺距1.5毫米, 右旋, 倒角 $2 \times 45^\circ$ 。



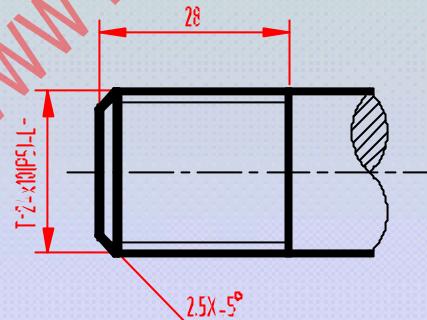
(3) 普通螺纹, 公称直径14毫米, 螺距1.5毫米, 长度28毫米, 左旋, 倒角 $2 \times 45^\circ$ 。



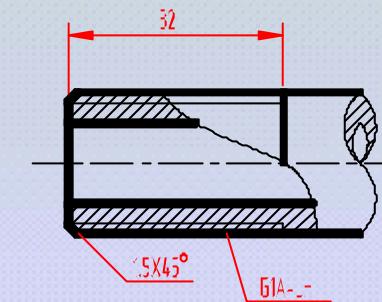
(4) 梯形螺纹, 公称直径20毫米, 导程8毫米, 长度28毫米, 线数2, 右旋, 倒角 $1.5 \times 45^\circ$ 。



(5) 梯形螺纹, 公称直径24毫米, 导程10毫米, 线数2, 长度28毫米, 左旋, 倒角 $2 \times 45^\circ$ 。

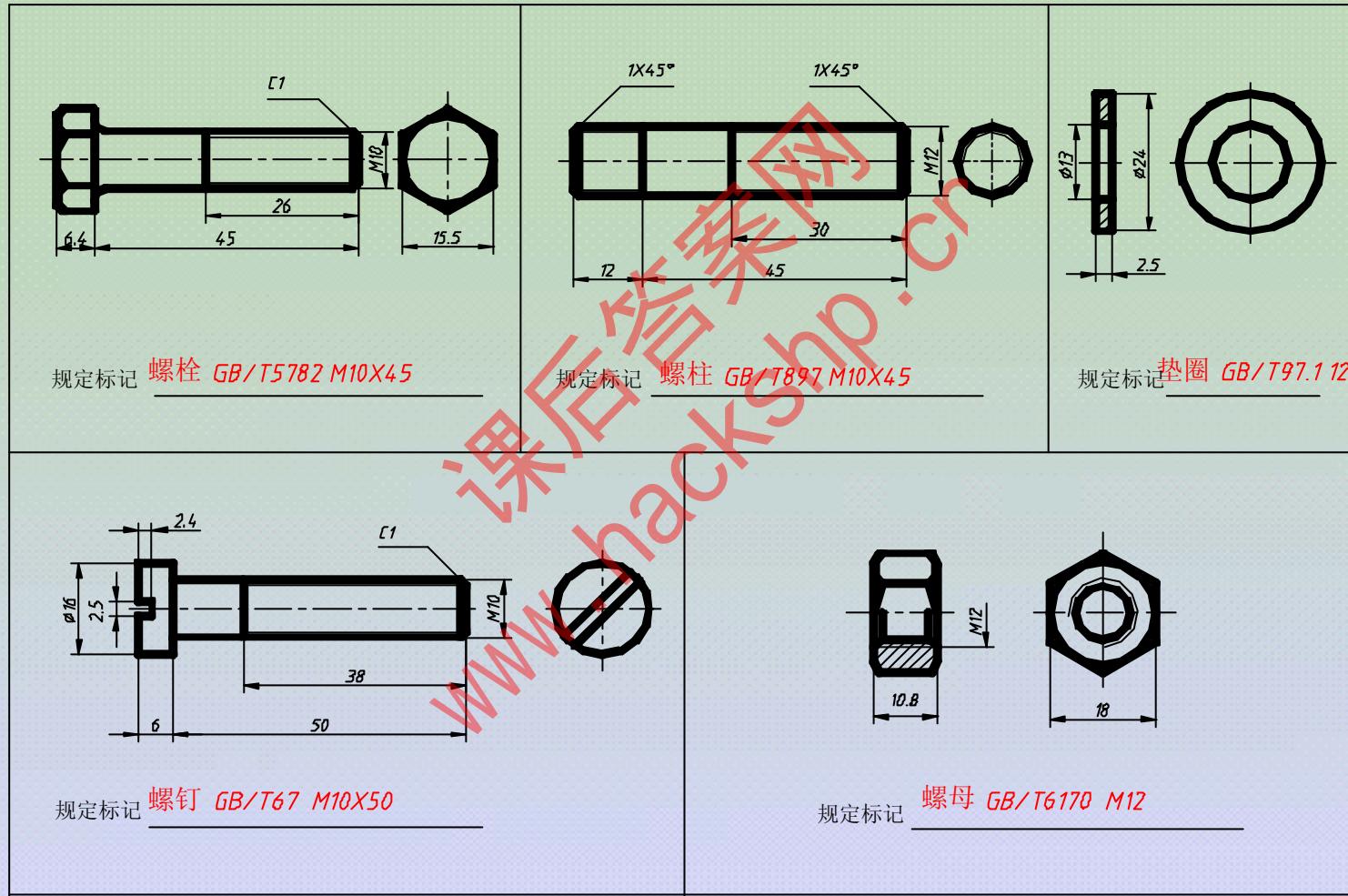


(6) 非螺纹密封的圆柱管螺纹, 公称直径1/2英寸, 长度32毫米, 中径公差为A级, 左旋, 倒角 $1.5 \times 45^\circ$ 。



第八章 标准件与常用件

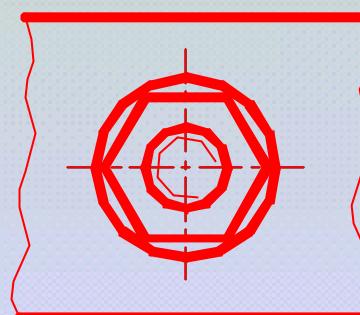
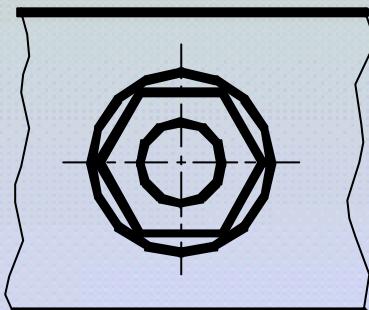
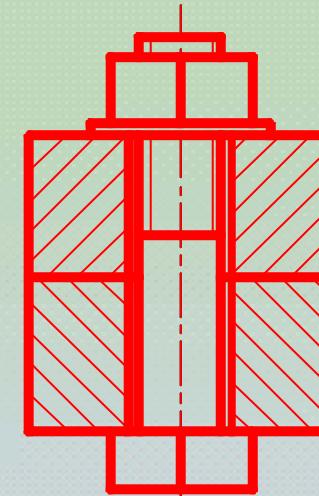
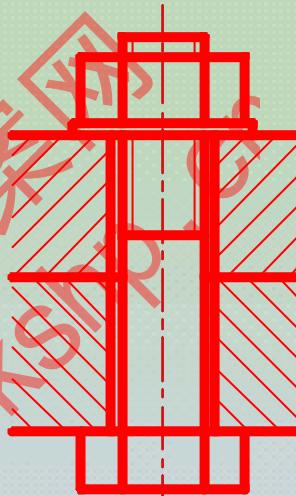
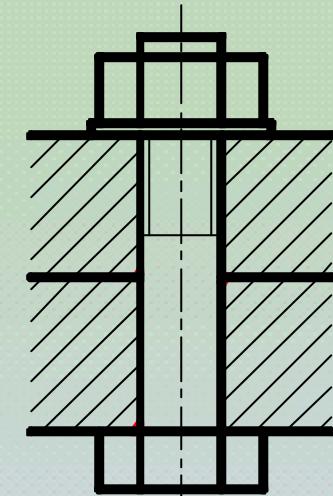
8-4 根据给出图形及尺寸，写出标准件的规定标记。



第八章 标准件与常用件

8-5 螺纹紧固件画法

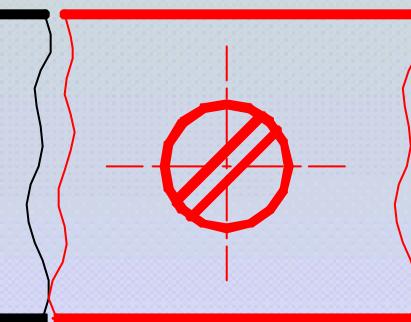
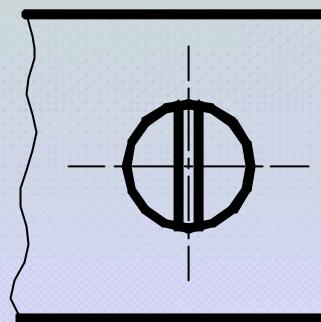
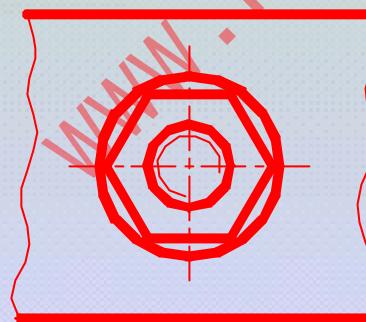
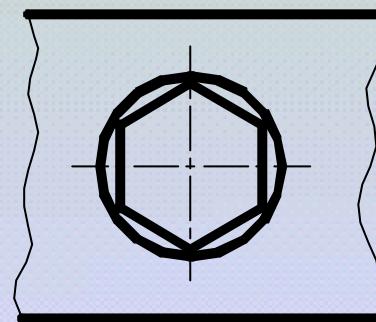
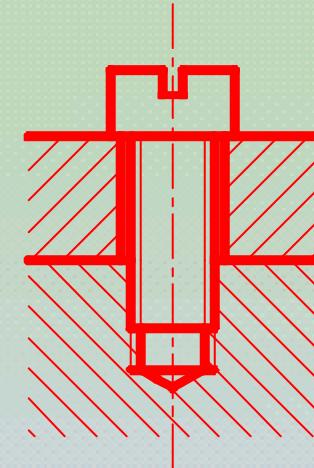
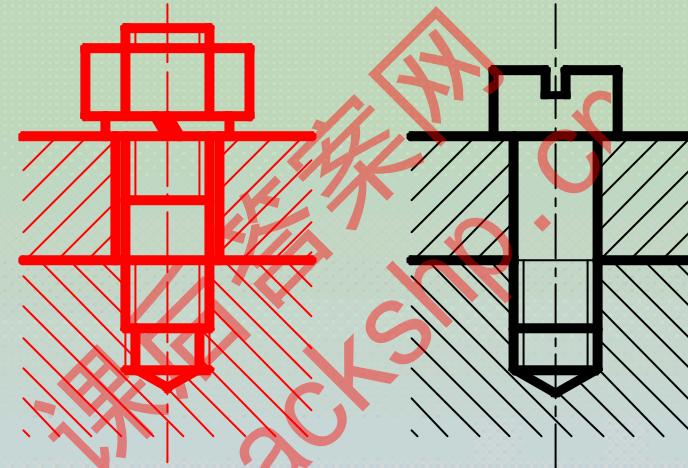
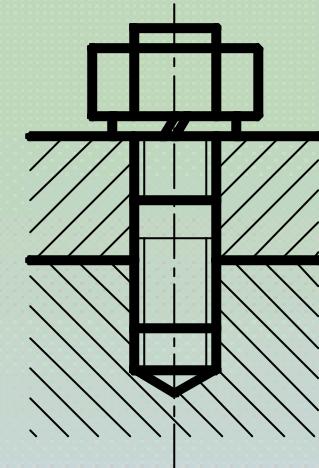
(1) 下面螺纹连接画法有错误, 在右边按正确画法画出



第八章 标准件与常用件

8-5 螺纹紧固件连接画法

(2) 下面螺柱连接和螺钉连接画法有错误, 在图右边按正确画法画出



第八章 标准件与常用件

8-6 用A3图纸按要求画出螺纹紧固件连接图，并在下方写出规定标记

1. 螺栓连接

(1) 螺栓 GB/T 5782-2000 M20× l

(l 由计算后查表确定)

(2) 螺母 GB/T 6170-2000 M20

(3) 垫圈 GB/T 97.1-1985 20

(4) 上板厚 $\delta_1=30$

下板厚 $\delta_2=35$

板宽 60

板长 65

要求:

画三视图，主视图作全剖视，左视图不剖，采用比例画法，不标尺寸。

2. 螺柱连接

(1) 螺柱 GB/T 898-2000 M20× l

(l 由计算后查表确定)

(2) 螺母 GB/T 6170-2000 M20

(3) 垫圈 GB/T 93-1987 20

(4) 上板厚 $\delta_1=30$

下板厚 $\delta_2=65$ 材料为铸铁

板宽 60

板长 65

要求:

画主、俯两视图，主视图作全剖视。采用比例画法，不标尺寸。

3. 螺钉连接

(1) 螺钉 GB/T 68-2000 M20× l

(2) 上板厚 $\delta_1=30$

下板厚 $\delta_2=65$ 材料为铸铁

板宽 60

板长 65

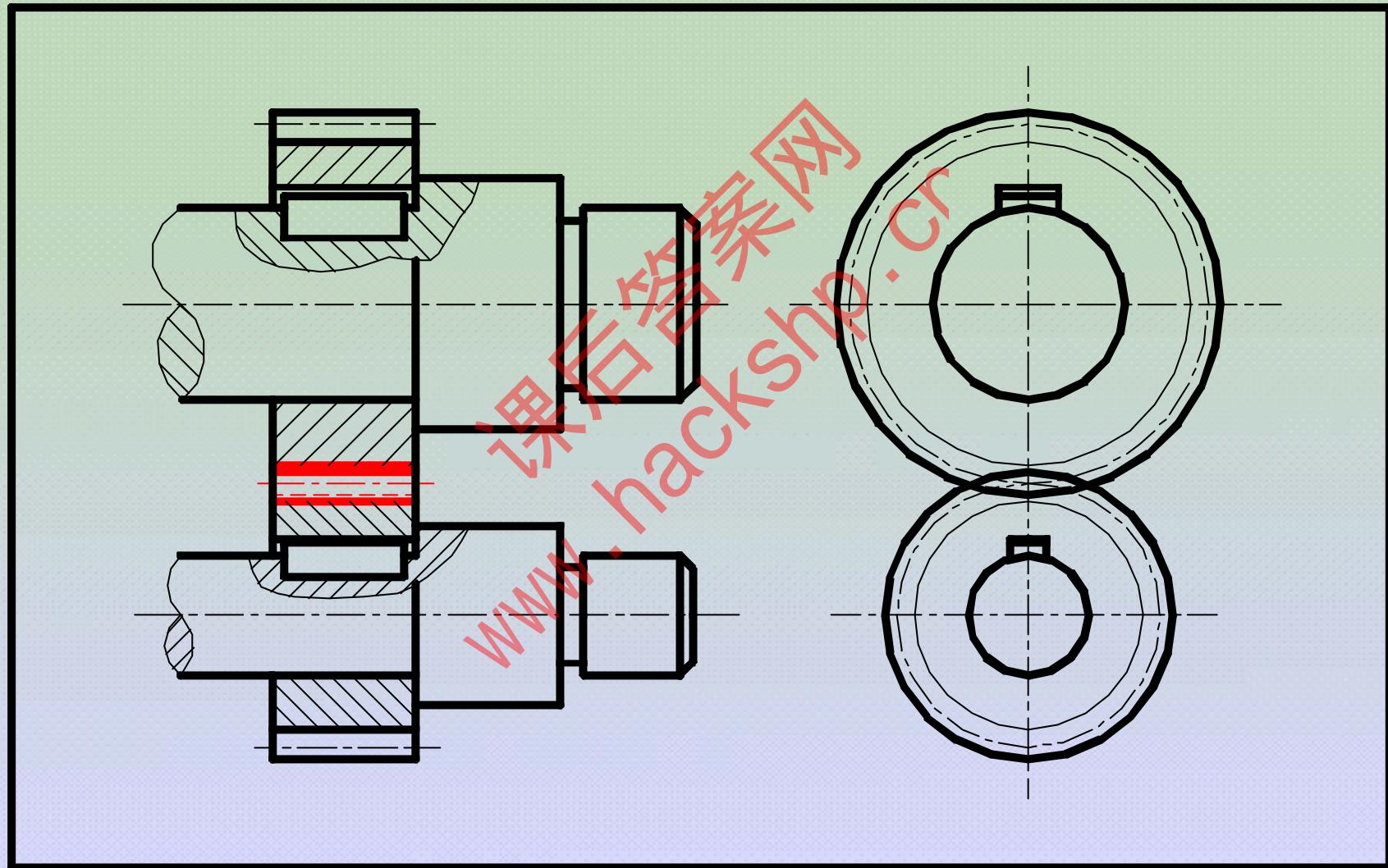
要求:

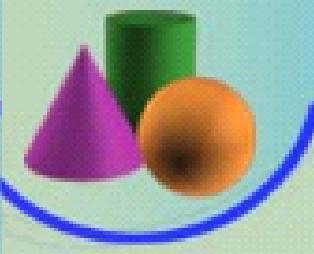
画主、俯两视图，主视图作全剖视。采用比例画法，不标尺寸。



第八章 标准件与常用件

8-7 用1: 1比例画出直齿圆柱齿轮的啮合图, $m=2$, $Z_1=22$, $Z_2=30$, 齿轮宽24。非圆视图作全剖视。小轴直径 $\varnothing 20$, 大轴直径 $\varnothing 32$, 用A型普通平键连接, 要求画出轴和键。





第九章 零件图

习题 9-1

习题 9-2

习题 9-3

习题 9-4

习题 9-5

习题 9-6

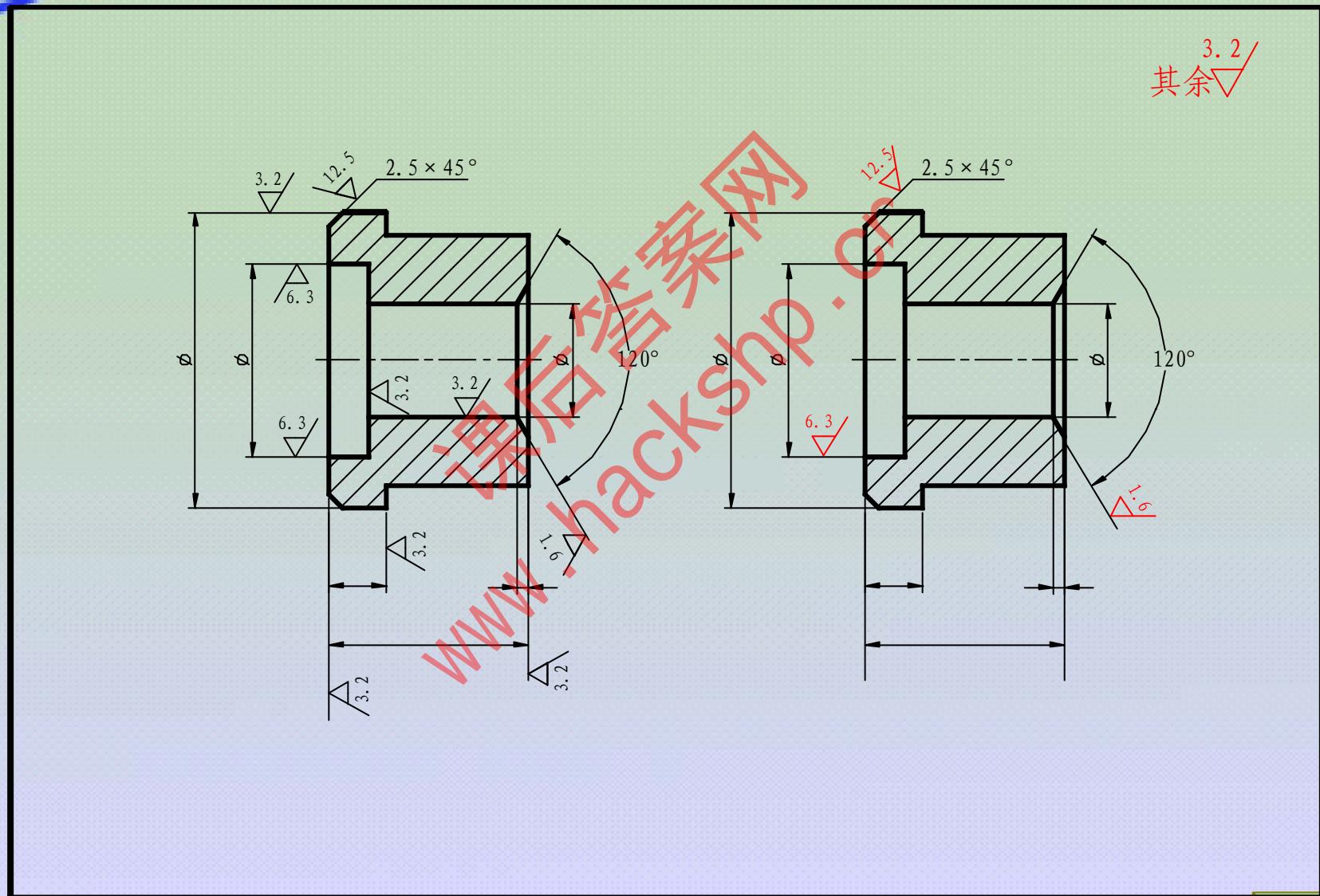
习题 9-7

课后习题答案
www.hackshop.cn

返回

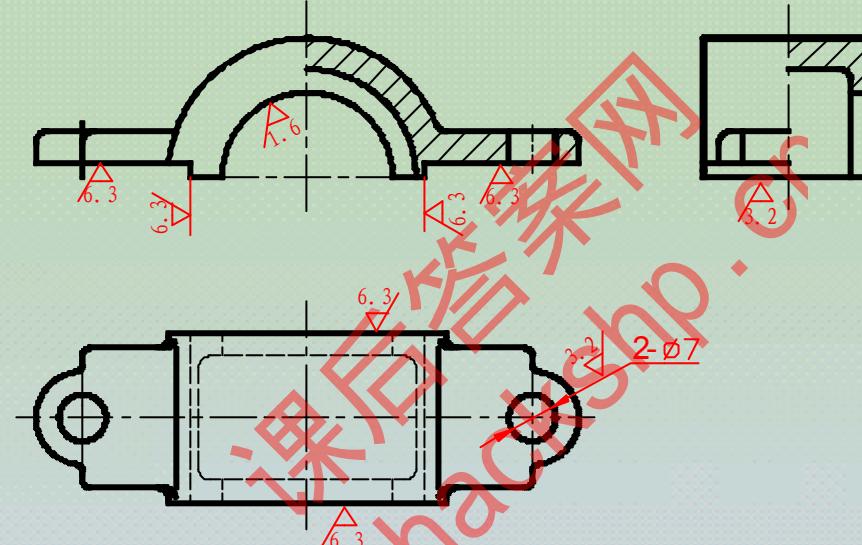
第九章 零件图

9-1 表面粗糙度 判别左图中表面粗糙度代号在标注方面的错误，并在右图中正确标注

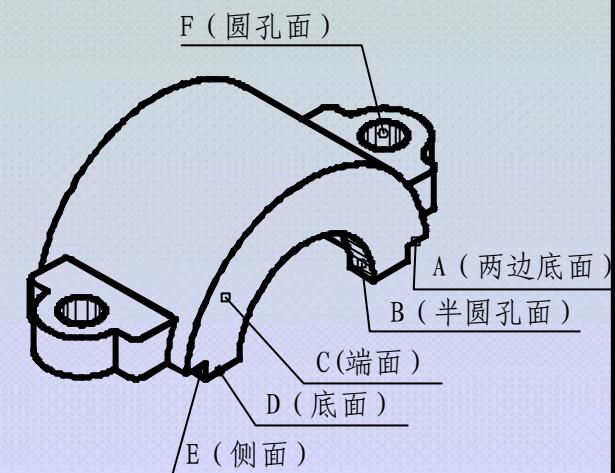


第九章 零件图

9-2 表面粗糙度 根据轴测图中指定的表面粗糙度（见下表），在视图的相应表面标注



表面位置	B	A C E	D F	其余
表面粗糙度代号	1.6/▽	6.3/▽	3.2/▽	▽

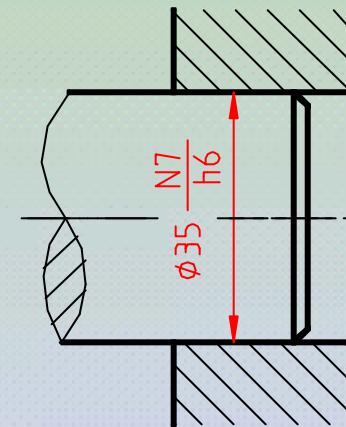
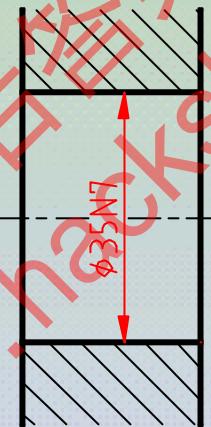
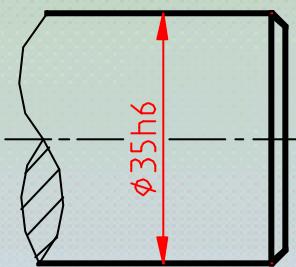


第九章 零件图

9-3 公差与配合

已知：轴与孔的基本尺寸为 $\varnothing 35$ ，采用基轴制配合，轴的公差等级为T6，孔的基本偏差代号为N6，公差等级为IT7。

- 要求：1. 在零件图上分别注出基本尺寸和公差代号，并写出偏差值。
2. 在装配图上标注基本尺寸和配合代号，并说明其配合种类。



轴的偏差值 $\varnothing 35 \begin{matrix} 0.000 \\ -0.016 \end{matrix}$

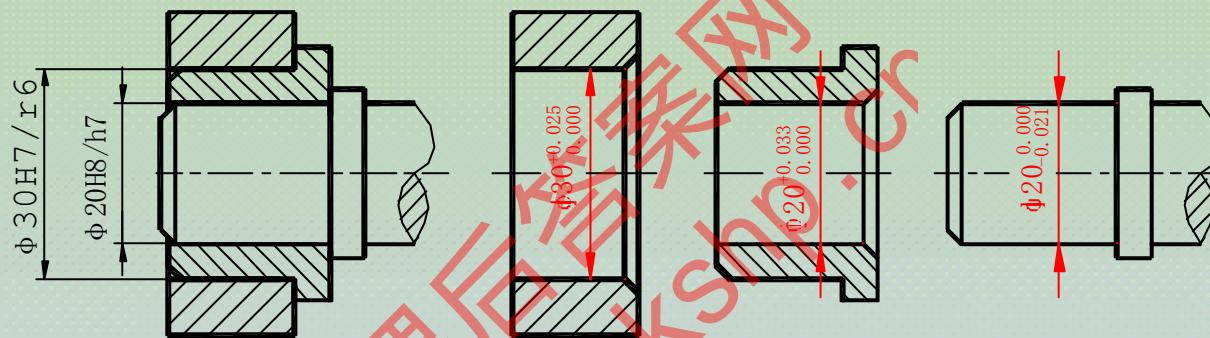
孔的偏差值 $\varnothing 35 \begin{matrix} -0.008 \\ -0.033 \end{matrix}$

孔与轴的配合属于 基轴制过渡配合



第九章 零件图

9-4 公差与配合 根据装配图中所注配合尺寸，分别在相应的零件图上注出基本尺寸和偏差数值，并说明这两个配合尺寸的含义。



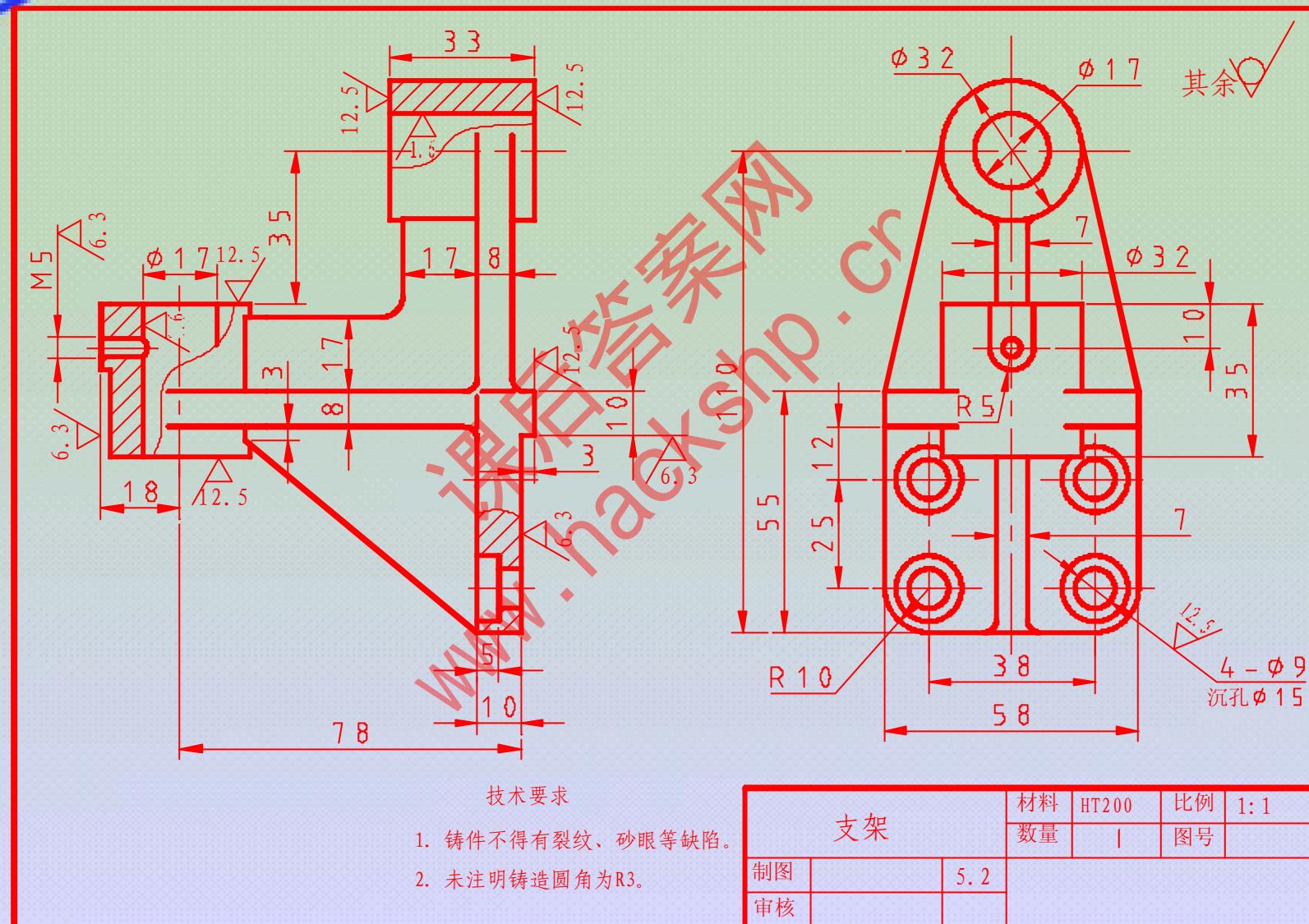
基孔制优先过盈配合 $\Phi 30$ 为基本尺寸，H7 为孔的公差带代号，H 为基准孔的基本偏差代号；7 为孔的公差等级。r6 为轴的公差带代号，r 为轴的基本偏差代号；6 为轴的公差等级。
 $\Phi 30H7/r6$ 表示：

基孔制优先间隙配合 $\Phi 20$ 为基本尺寸，H8 为孔的公差带代号，H 为基准孔的基本偏差代号；8 为孔的公差等级。h7 为轴的公差带代号，h 为基准轴的基本偏差代号；7 为轴的公差等级。
 $\Phi 20H8/h7$ 表示：



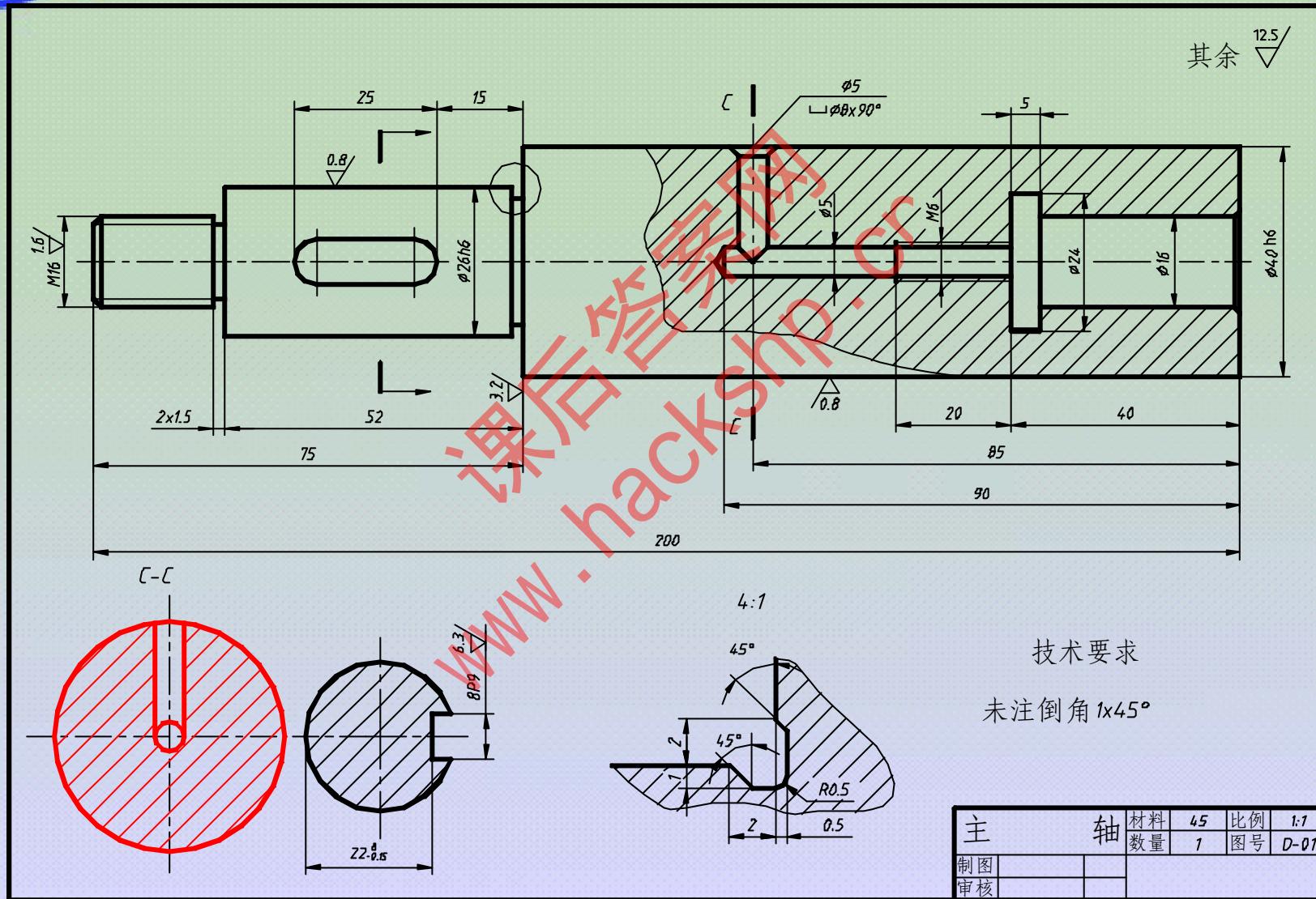
第九章 零件图

9-6根据支架的轴测图, 绘制其零件图



第九章 零件图

9-7 读零件图 看懂主轴零件图，在指定位置画出C-C剖面图。



第九章 零件图

9-8 读零件图 要求：看懂连接快零件图，补出B-B半剖视图。

