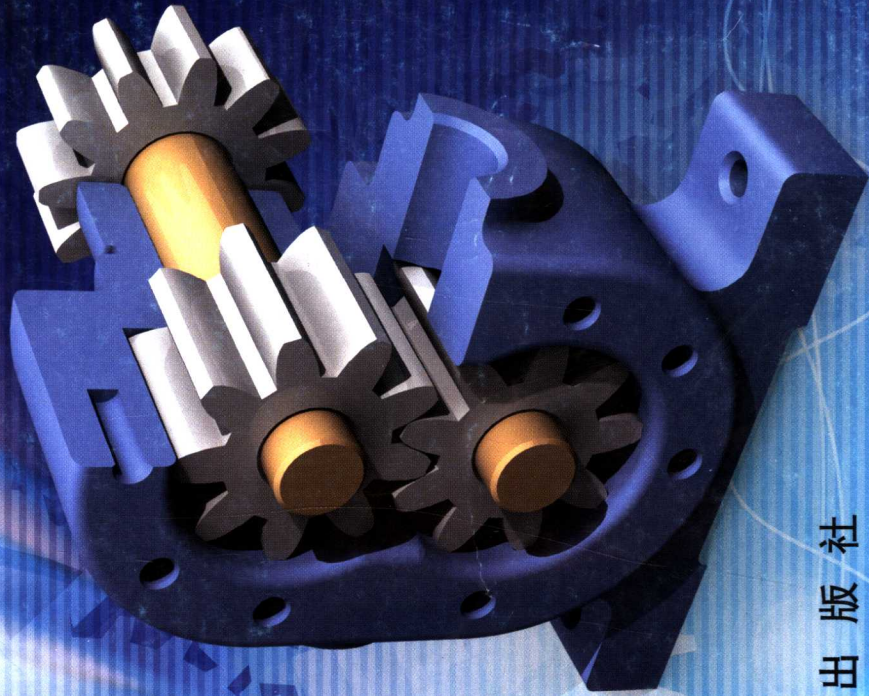


高等工科学学校机械设计基础综合与创新教程

# 计算机工程制图习题集

宜沈平生 编  
赵敖生 审



东南大学出版社

# 计算机工程制图习题集

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## 前 言

本习题集是宜沈平等编写的《计算机工程制图与机械设计》教材的配套用书,主要包括工程制图基本训练、计算机上机操作实例和大型作业等内容。

本习题集具有如下特点:

1. 采用最新《机械制图》国家标准,学以致用,为今后实际工作打下基础;
2. 图形准确、清晰、美观,配备了许多实体图形,有助于培养学生的空间形象思维能力,加深对平面视图的理解;
3. 内容的安排上,注意与课程教学紧密配合,由浅入深,循序渐近;
4. 提供了一级直齿圆柱齿轮减速器的主要零件图及装配图,供学生进行机械课程设计时参考;
5. 习题集内容丰富,具有开发智力的趣味题及教学内容的引申题。

本习题集参考了一些同类教材及习题集,详见《计算机工程制图与机械设计》教材“参考文献”,谨此致谢。

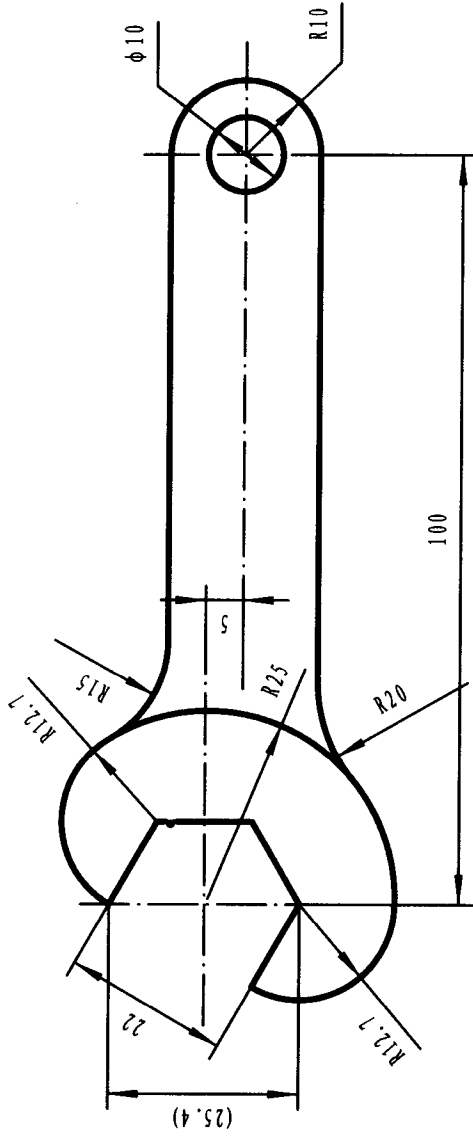
本习题集由赵敖生先生审阅。

编 者

2004年6月

1. 在横放A4图纸上以1:1比例，绘制图示扳手轮廓图，并标注尺寸

01



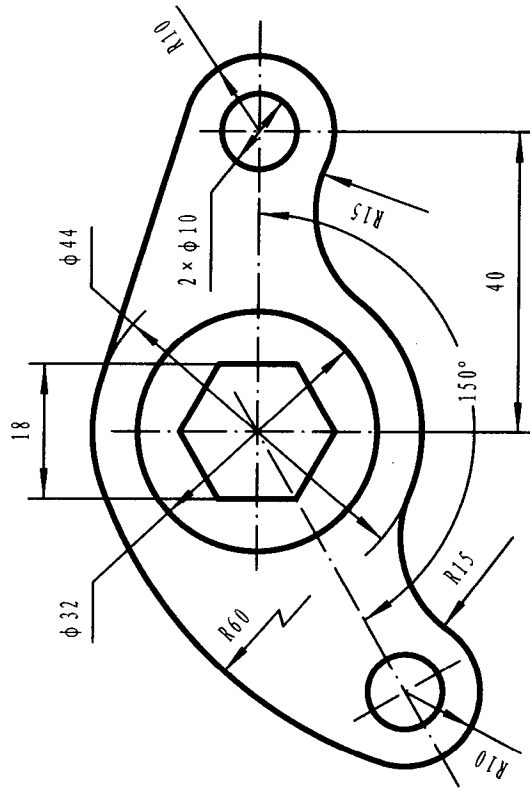
班级

姓名

成绩

2. 在横放A4图纸上以1:1比例, 绘制图示零件轮廓图, 并标注尺寸

02

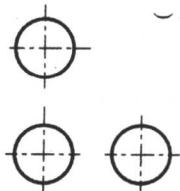
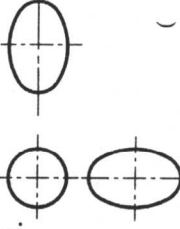
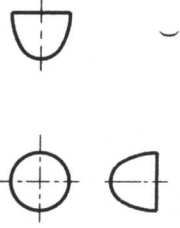
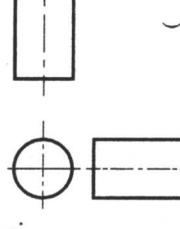
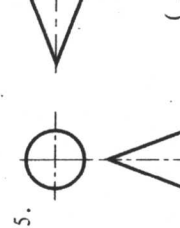
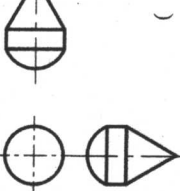
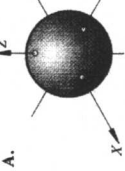
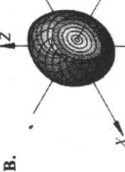
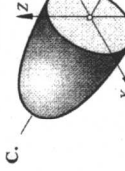
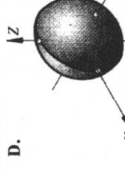
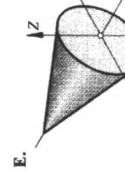
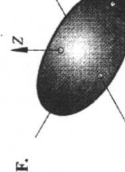
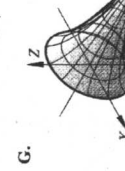
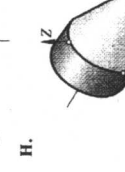
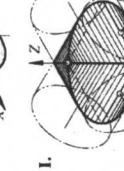
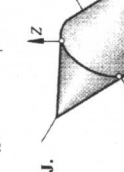
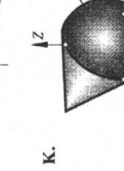
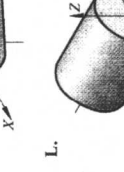
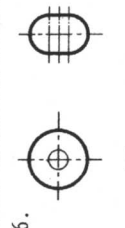
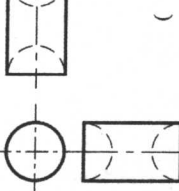
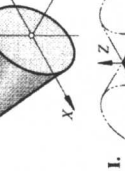
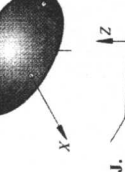
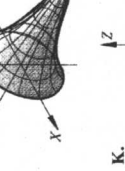
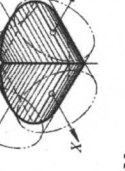
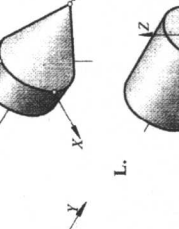
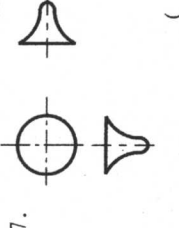
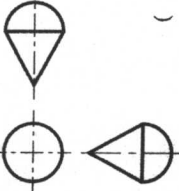
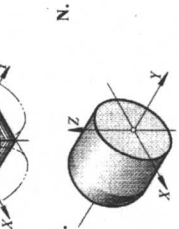
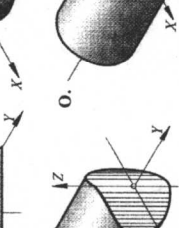
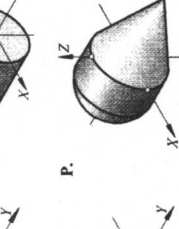
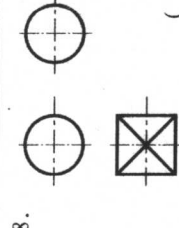
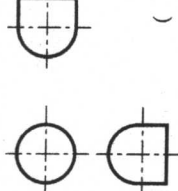
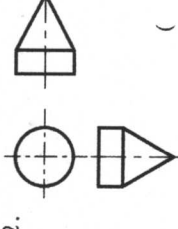
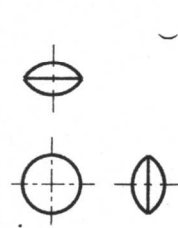
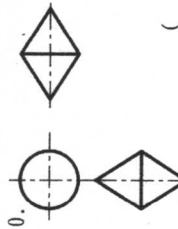
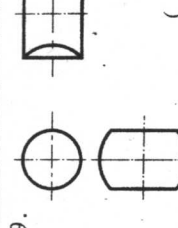


班级

姓名

成绩

3. 将对应的立体轴测测图号填入括号内

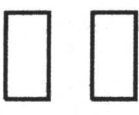



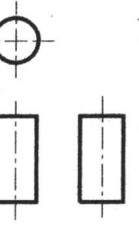
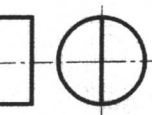

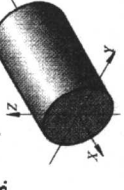
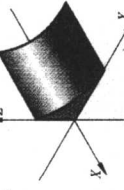
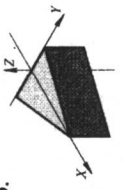
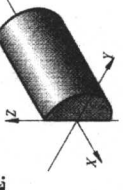
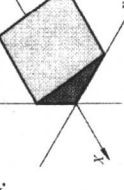
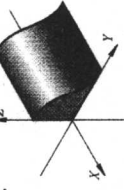
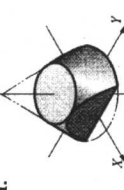
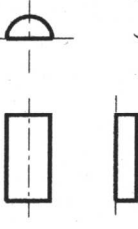


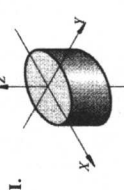
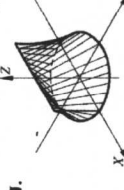
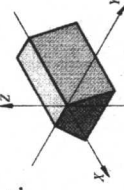
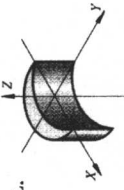
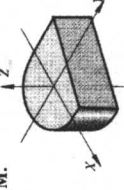
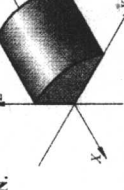
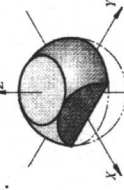
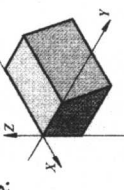

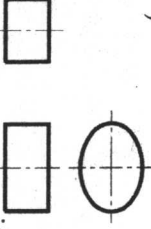
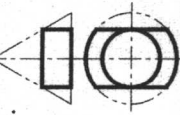
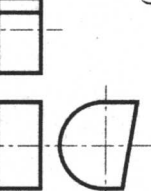

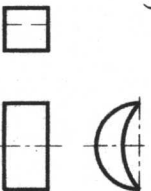
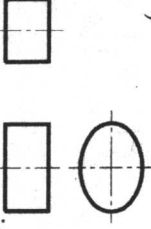
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班级

姓名

成绩

4. 将对应的立体轴测图号填入括号内

<p>1.</p>  <p>( )</p>	<p>2.</p>  <p>( )</p>	<p>3.</p>  <p>( )</p>	<p>4.</p>  <p>( )</p>	<p>5.</p>  <p>( )</p>
<p>16.</p>  <p>( )</p>	<p>A.</p>  <p>B.</p>  <p>C.</p>  <p>D.</p> 	<p>E.</p>  <p>F.</p>  <p>G.</p>  <p>H.</p> 	<p>6.</p>  <p>( )</p>	<p>7.</p>  <p>( )</p>
<p>15.</p>  <p>( )</p>	<p>I.</p>  <p>J.</p>  <p>K.</p>  <p>L.</p> 	<p>M.</p>  <p>N.</p>  <p>O.</p>  <p>P.</p> 	<p>8.</p>  <p>( )</p>	<p>9.</p>  <p>( )</p>
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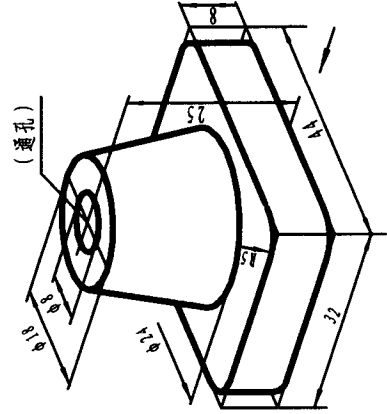
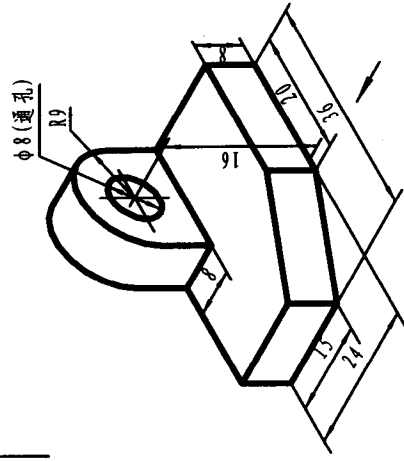
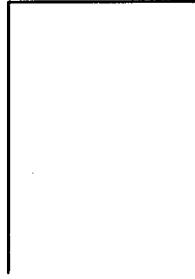
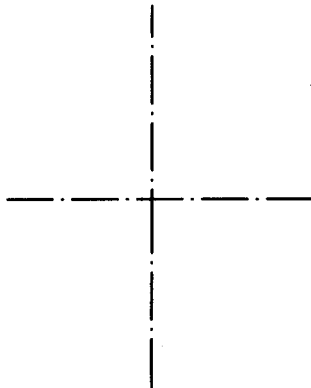
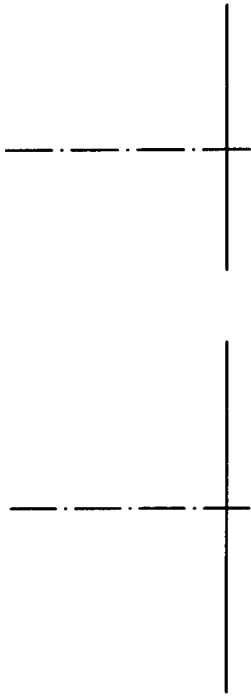
班级

姓名

成绩

5. 根据轴测图及其尺寸，画三视图（箭头指向为主视图投影方向）

05



班级

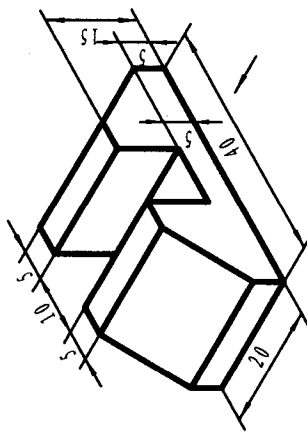
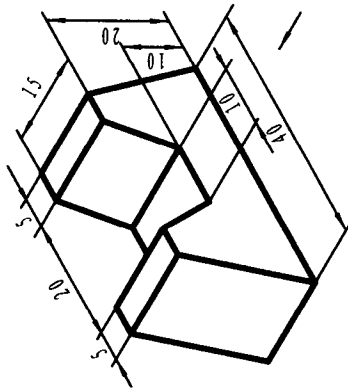
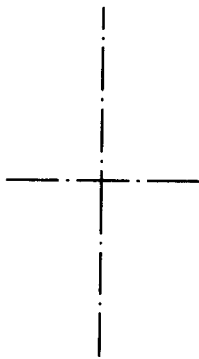
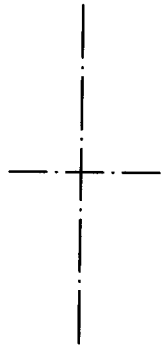
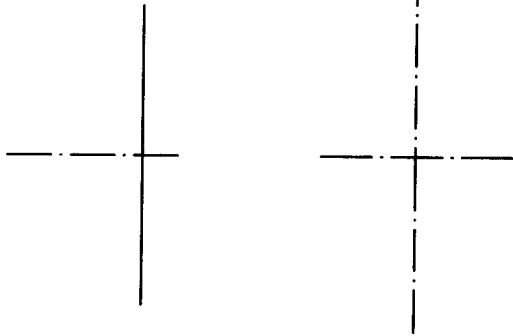
姓名

成绩



6. 根据轴测图及其尺寸，画三视图（箭头指向为主视图投影方向）

06



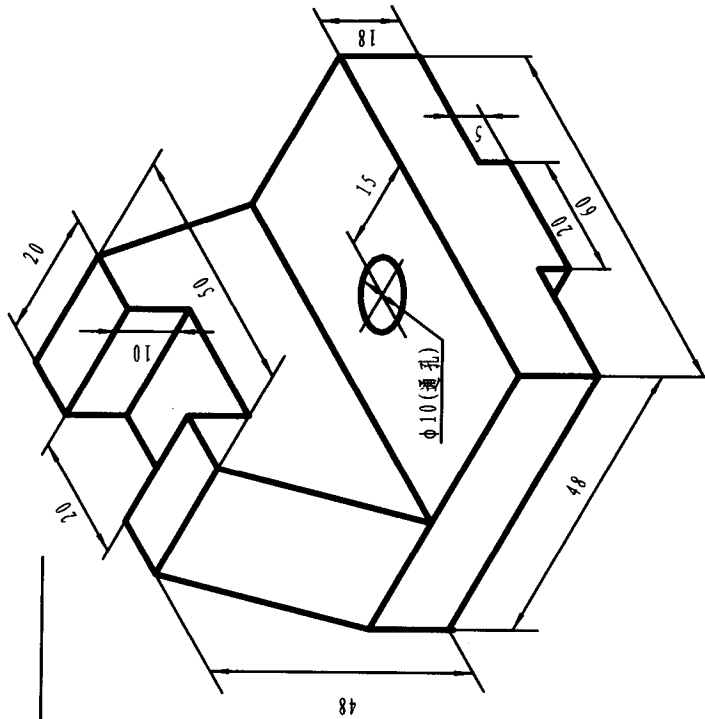
班级

姓名

成绩

7. 根据轴测图及其尺寸，画三视图（箭头指向为主视图投影方向）

07



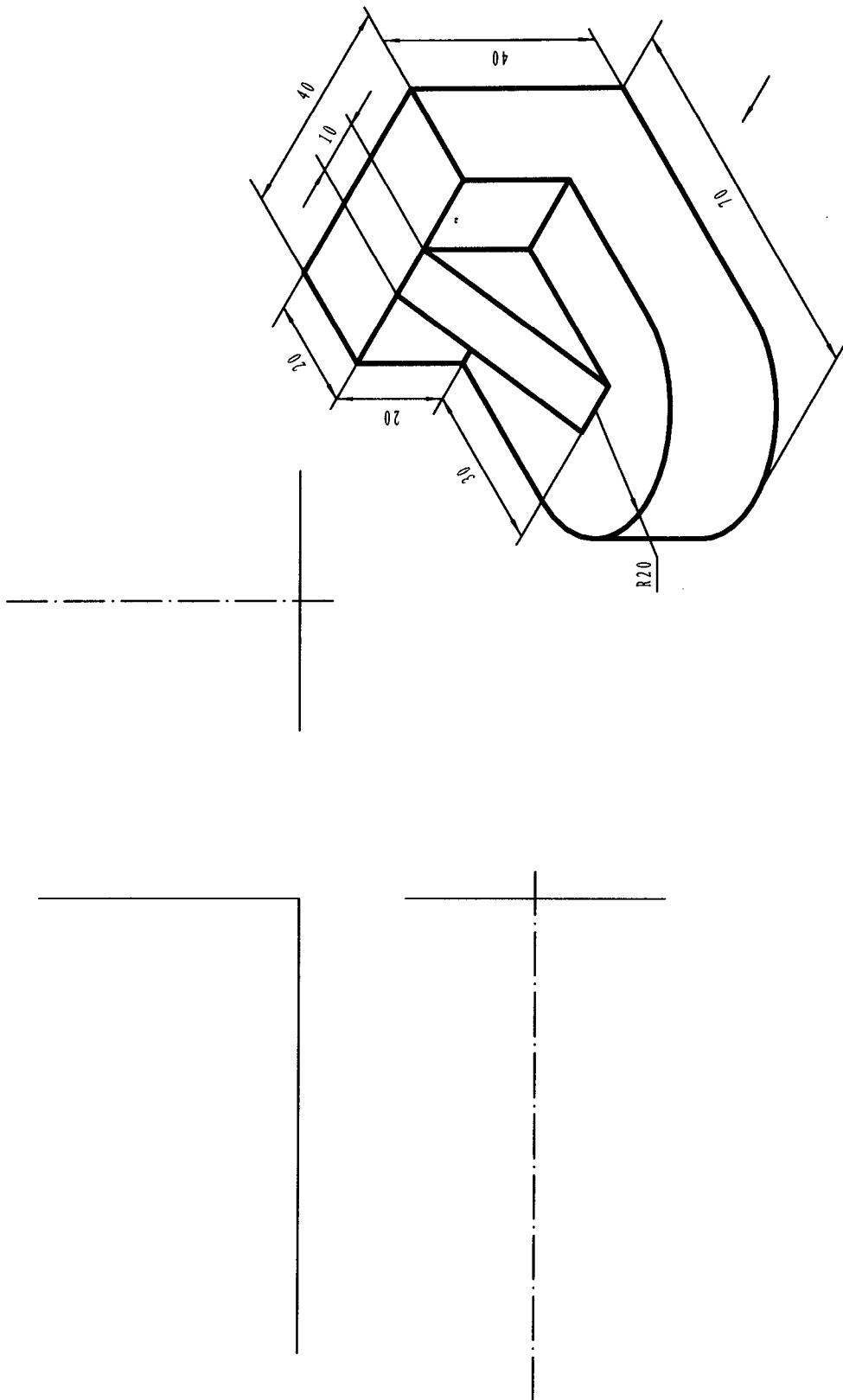
班级

姓名

成绩

8. 根据轴测图及其尺寸，画三视图（箭头指向为主视图投影方向）

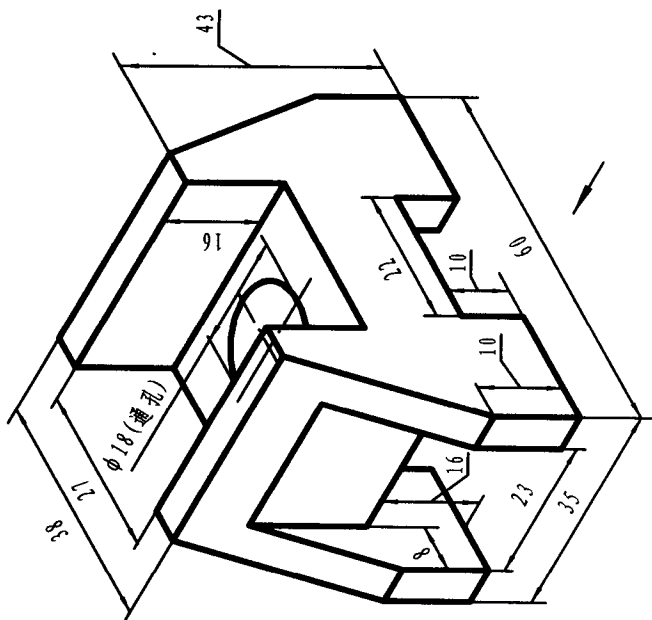
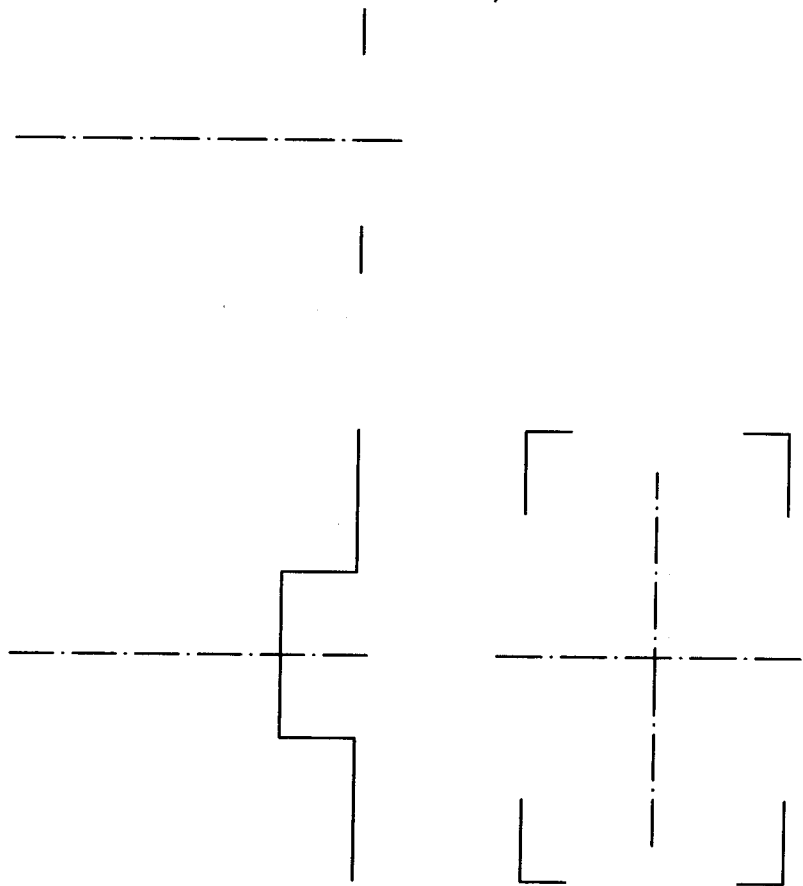
08



班级 \_\_\_\_\_ 姓名 \_\_\_\_\_ 成绩 \_\_\_\_\_

9. 根据轴测图及其尺寸，画三视图（箭头指向为主视图投影方向）

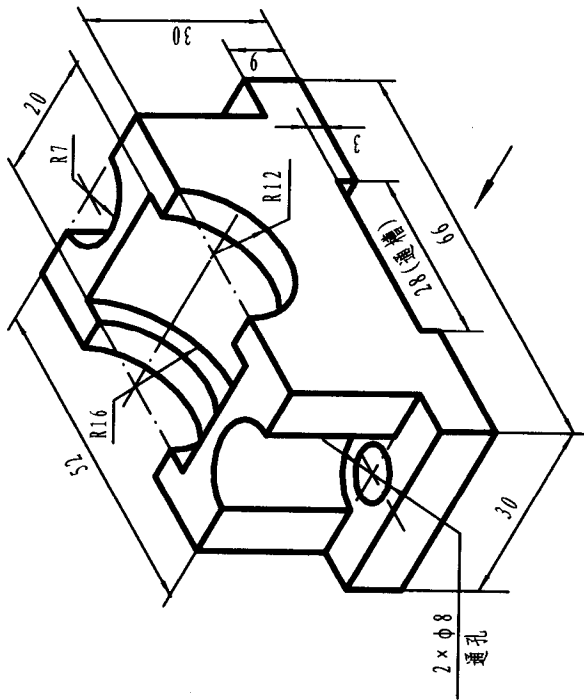
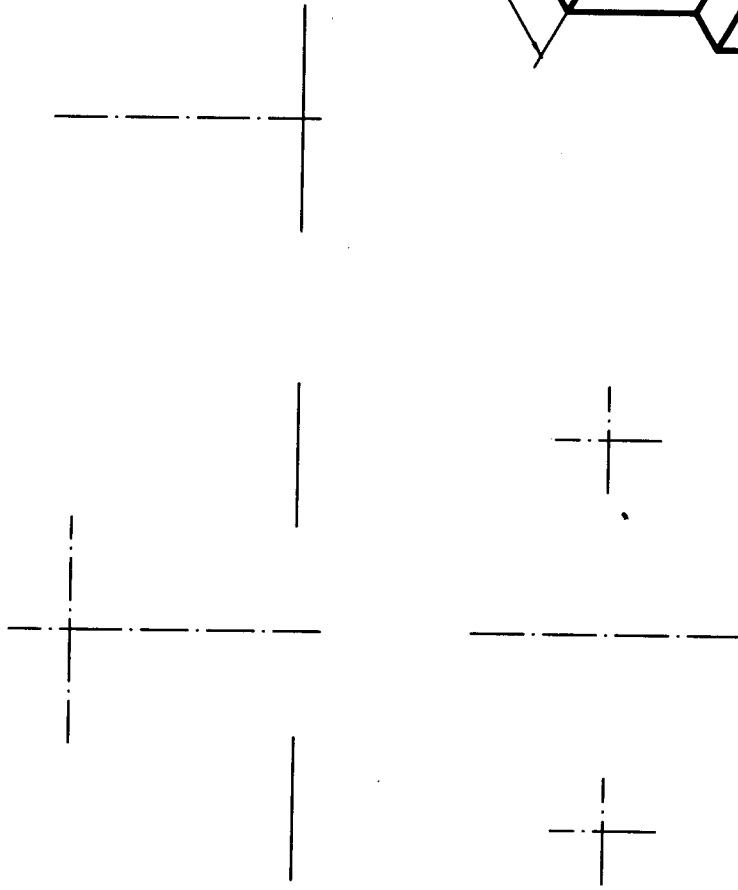
09



班级 \_\_\_\_\_ 姓名 \_\_\_\_\_ 成绩 \_\_\_\_\_

10. 根据轴测图及其尺寸，画三视图（箭头指向为主视图投影方向）

10

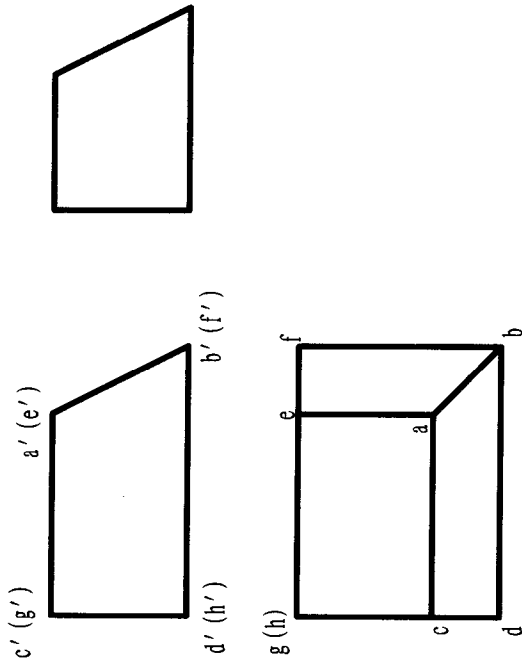


班级

姓名

成绩

(1) 判别直线的空间位置及相对位置

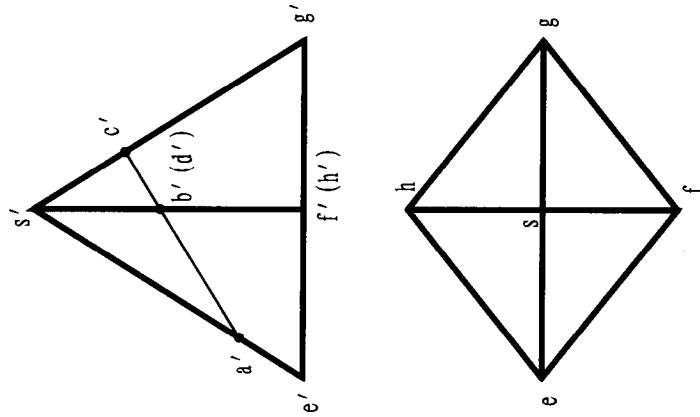


- AB \_\_\_\_\_ 线 AC \_\_\_\_\_ 线
- CD \_\_\_\_\_ 线 BD \_\_\_\_\_ 线
- EF \_\_\_\_\_ 线 AE \_\_\_\_\_ 线
- BF \_\_\_\_\_ 线 GH \_\_\_\_\_ 线

AB与AC \_\_\_\_\_ AB与CD \_\_\_\_\_ AB与CG \_\_\_\_\_  
 AC与AE \_\_\_\_\_ AC与BD \_\_\_\_\_ AC与BF \_\_\_\_\_

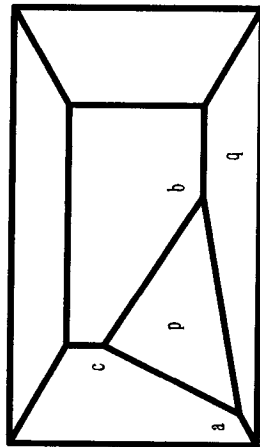
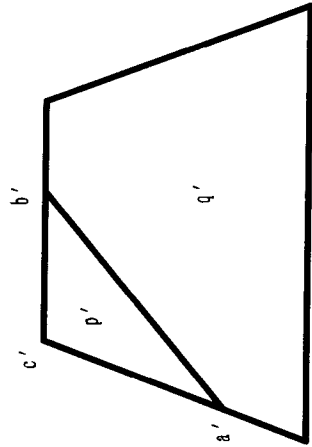
(2) 补出四棱锥SEFGH的左视图，并作出其棱线上点

A、B、C、D的三面投影



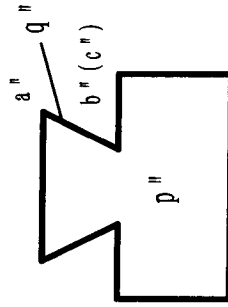
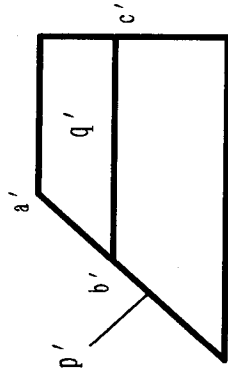
12. 补画第三视图，标明指定线、面的名称

(1)



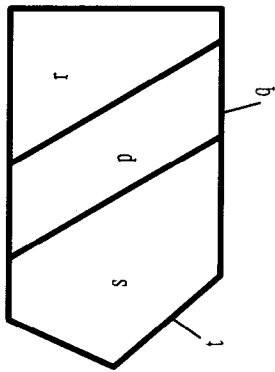
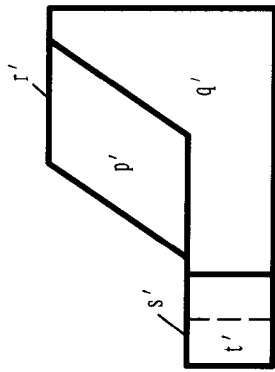
P面是\_\_\_\_面  
Q面是\_\_\_\_面  
AB线是\_\_\_\_线  
BC线是\_\_\_\_线

(2)



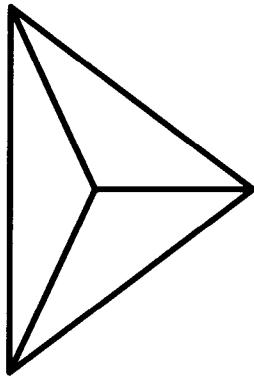
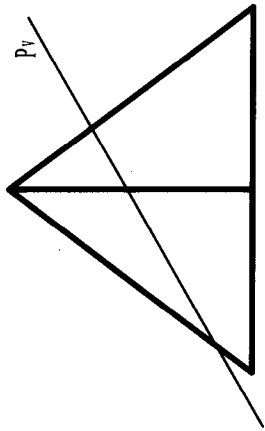
P面是\_\_\_\_面  
Q面是\_\_\_\_面  
AB线是\_\_\_\_线  
BC线是\_\_\_\_线

(1) 分析立体各表面的空间位置



平面P是 \_\_\_\_\_ 面  
 平面Q是 \_\_\_\_\_ 面  
 平面R是 \_\_\_\_\_ 面  
 平面S是 \_\_\_\_\_ 面  
 平面T是 \_\_\_\_\_ 面

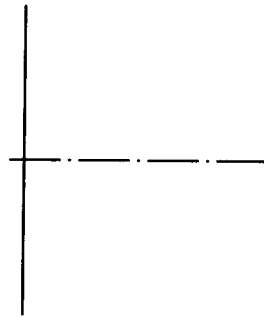
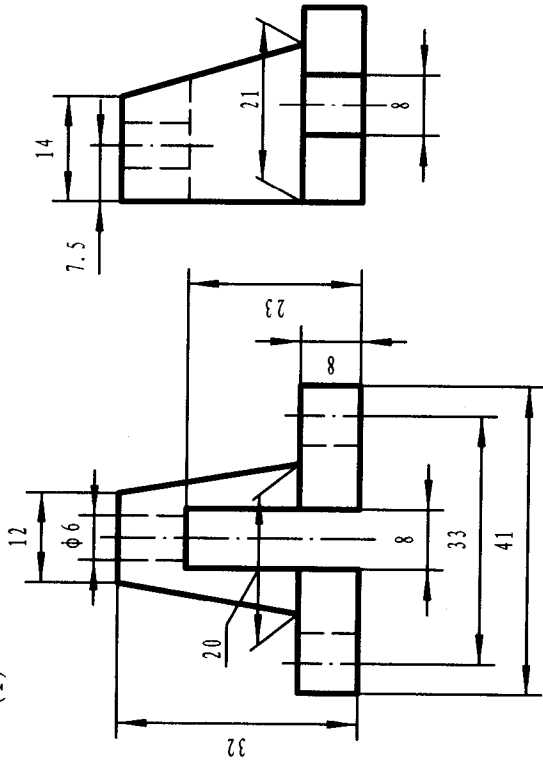
(2) 补画立体与平面P相交后产生的表面交线的水平投影





14. 根据切口立体的轴测图和二视图，补画第三视图

(1)



(2)

