

职工科技教育课本

机械制图20讲习题集

《机械制图20讲》编写组 编

安徽科学技术出版社

责任编辑: 孙述庆
封面设计: 蒋辉明

机械制图 20 讲习题集

《机械制图 20 讲》编写组

*

安徽科学技术出版社出版

(合肥市跃进路 1 号)

安徽省新华书店发行

安徽新华印刷厂印刷

*

开本: 787×1092 1/8 印张: 3

1982 年 9 月第 1 版 1982 年 9 月第 1 次印刷

印数: 1—21,000

统一书号: 15200·24 定价: 0.45 元

说 明

本习题集是与《机械制图20讲》一书配套使用的,因此习题的编号采用双号编码。例如3—11,第一数码“3”表示《机械制图20讲》第三单元,后一数码“11”表示这一单元的第11题。其余类推。

学员使用本习题集作练习时,还应注意以下事项:

- 1.凡规定在本习题集上绘制的题目,一律用三角板、圆规、铅笔进行作图;
- 2.凡规定作业用绘图纸绘制时,学员必须按题目所规定的图纸幅面大小,选择好绘图纸,并贴在图板上,用丁字尺、三角板、圆规、铅笔进行作图;
- 3.绘制本作业时,学员应具备以下绘图工具和用具:3号绘图板、丁字尺、绘图仪器、三角板、绘图铅笔(HB、2H、2B各一支)和橡皮等;
- 4.作图时,线型应粗细分明:粗实线0.8~1毫米,用2B铅笔画;虚线0.4~0.5毫米,用HB铅笔画;细实线、点划线0.2~0.3毫米,用HB铅笔画。画底稿时,一律用2H笔作图。

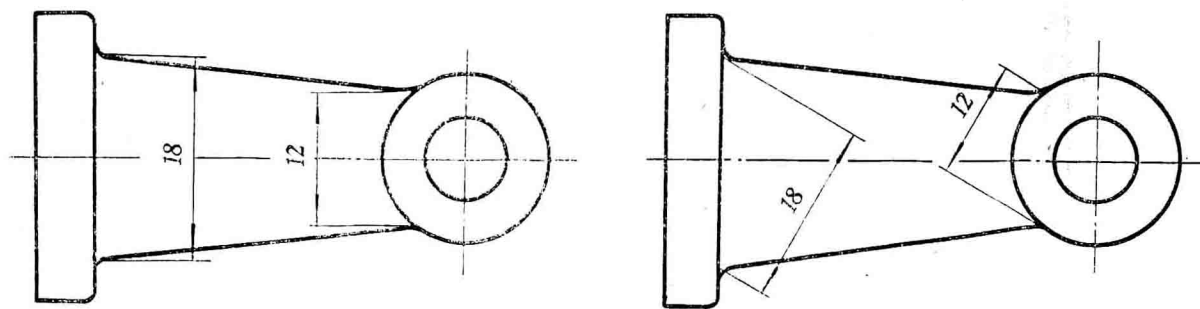
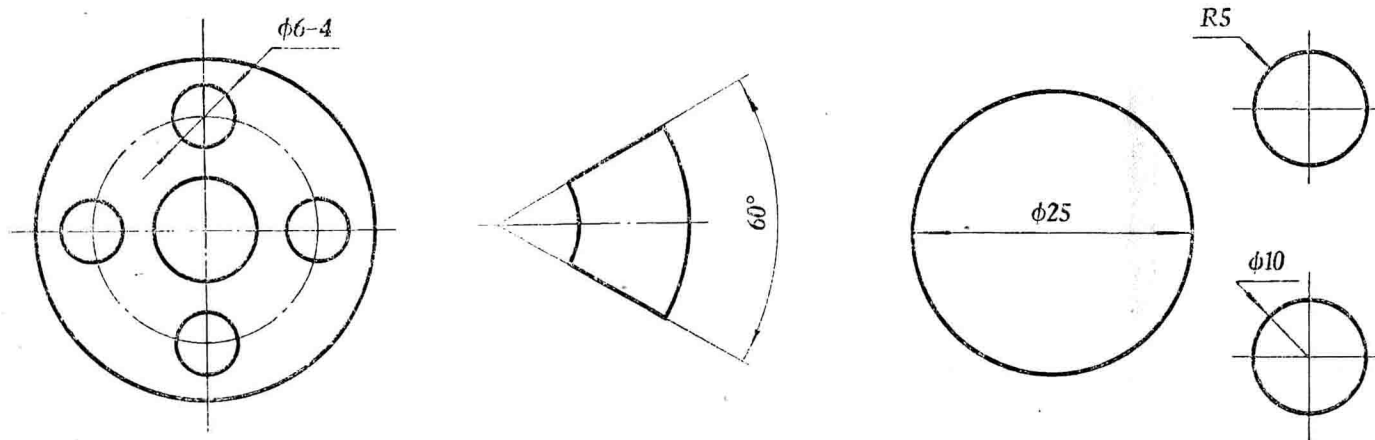
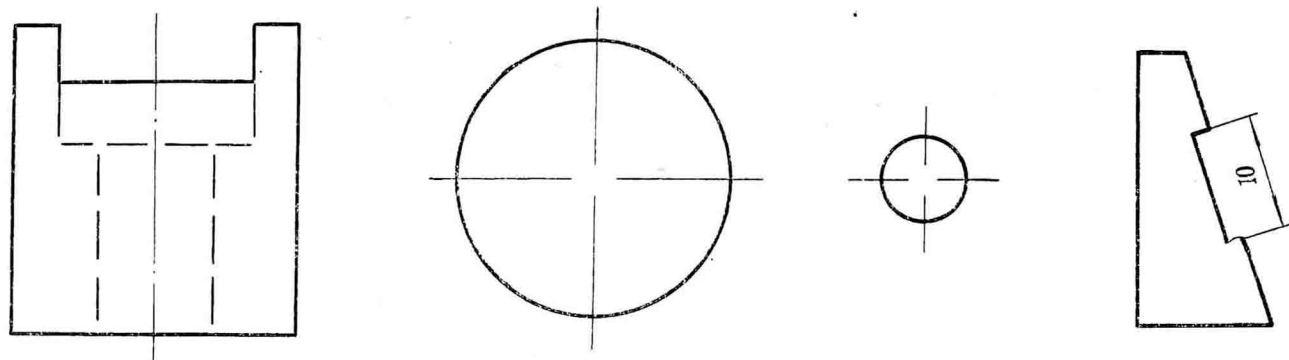
《机械制图20讲》编写组

1982年5月

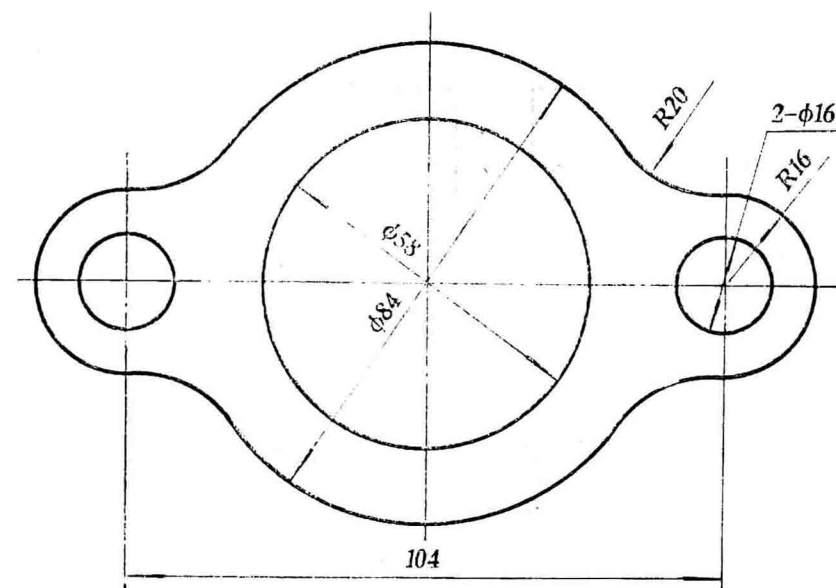
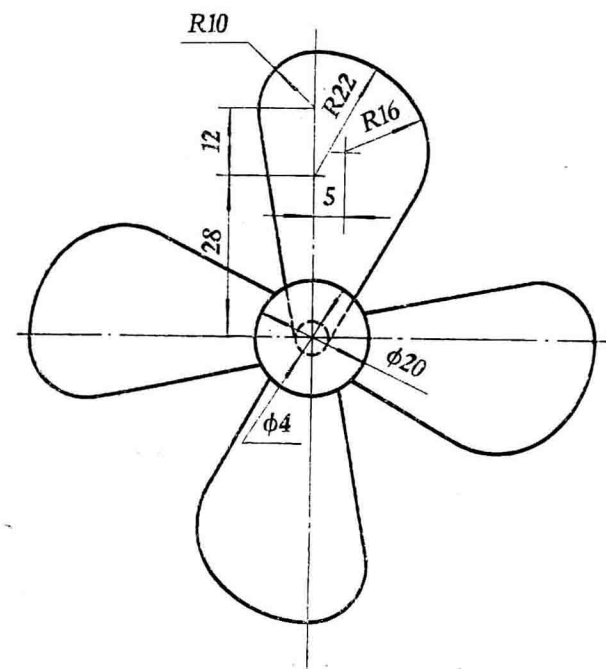
目 录

说明.....	(1)
1—1~1—2 机械制图的预备知识.....	(1)
2—1~2—6 正投影图.....	(2)
3—1~3—21 零件的表达方法.....	(8)
4—1~4—9 常用件的画法.....	(13)
5—1~5—6 零件图.....	(16)
6—1 装配图.....	(20)

1-1 改正下列图中的错误或画得不好的地方。

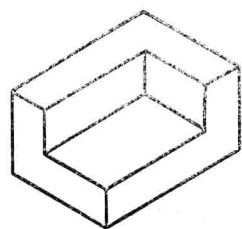


1-2 按实际尺寸画出下列图形。

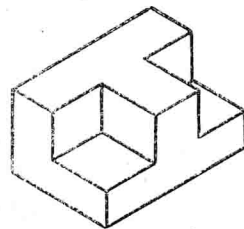


班级 姓名

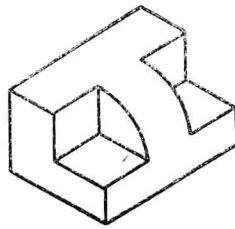
2—1 由立体图找出相应的三视图，并在括号内注出相应的图号。



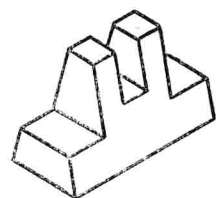
1



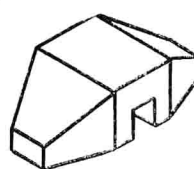
2



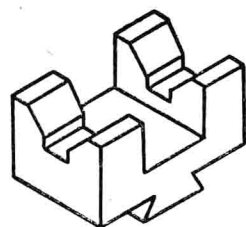
3



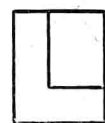
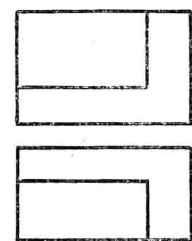
4



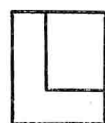
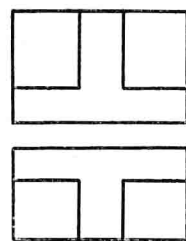
5



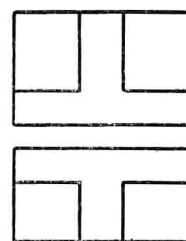
6



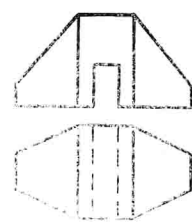
()



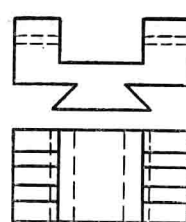
()



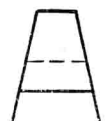
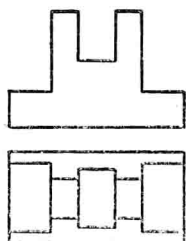
()



()

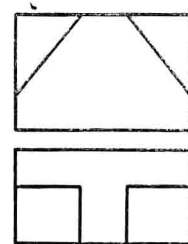


()

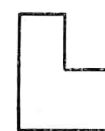
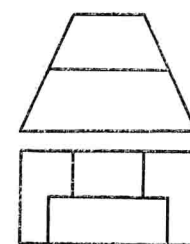


()

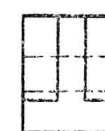
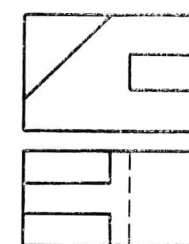
2—2 由三视图想象物体的形状，然后找出相应的立体图，并在括号内注上相应的图号。



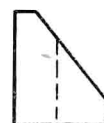
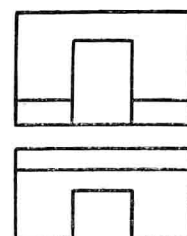
1



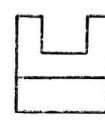
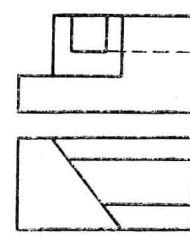
2



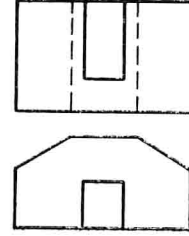
3



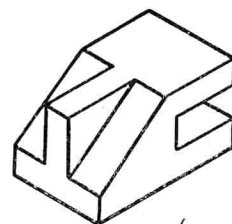
4



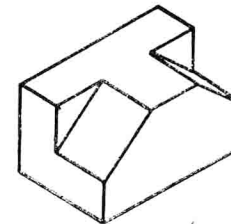
5



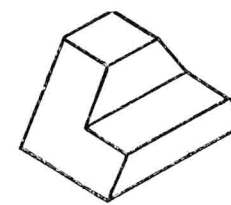
6



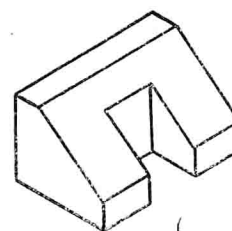
()



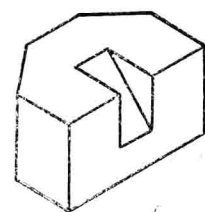
()



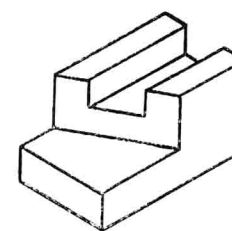
()



()



()



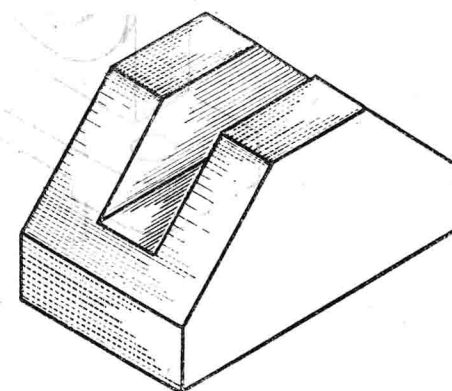
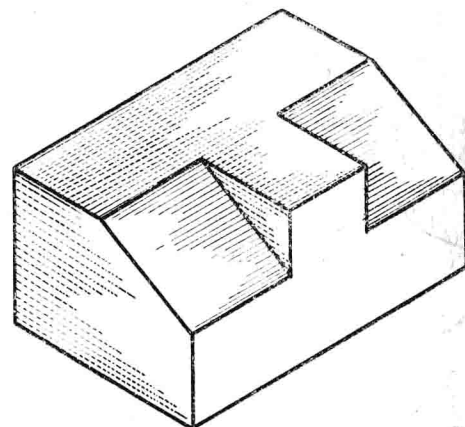
()

班级

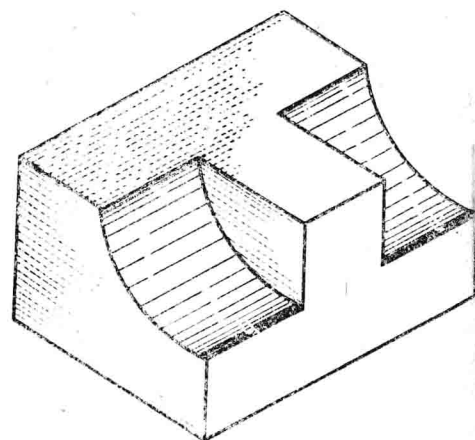
姓名

2—3 根据立体图画出三视图。

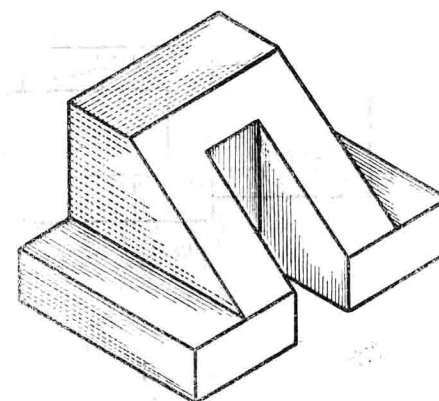
1



3



4

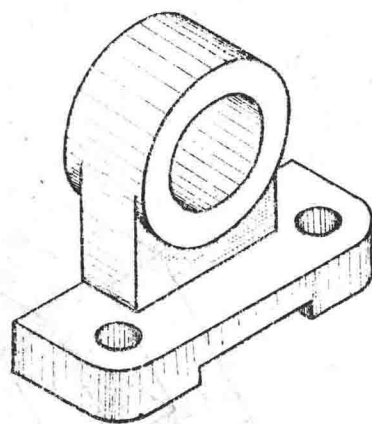


班级

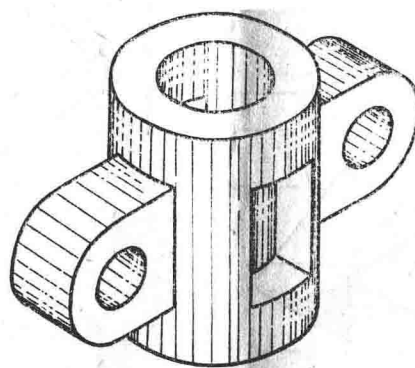
姓名

2—4 下列立体图所示物体是由哪些基本形体组成?并画出它们的三视图。

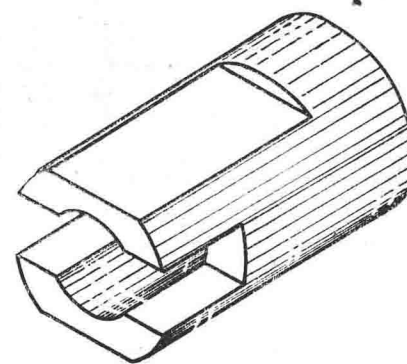
1



2

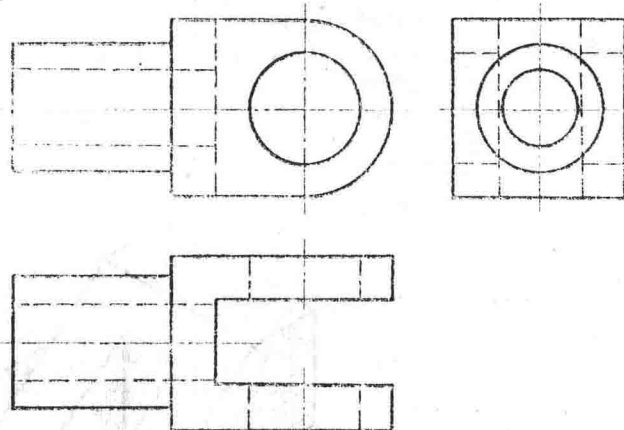


3

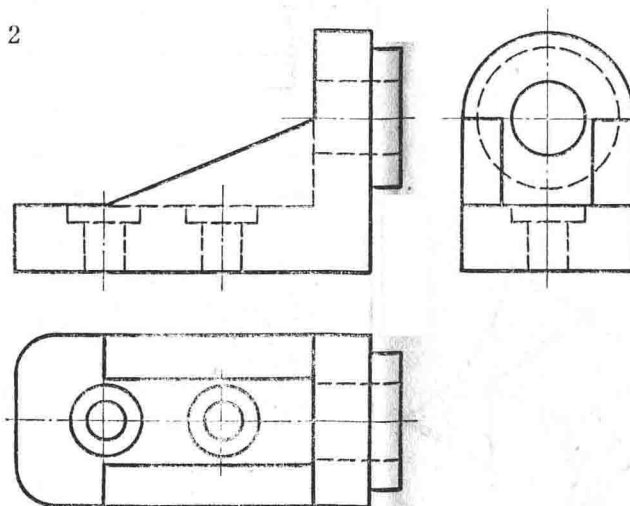


2—5 看懂下列物体的三视图,并分析它们是由哪些基本形体组成的。

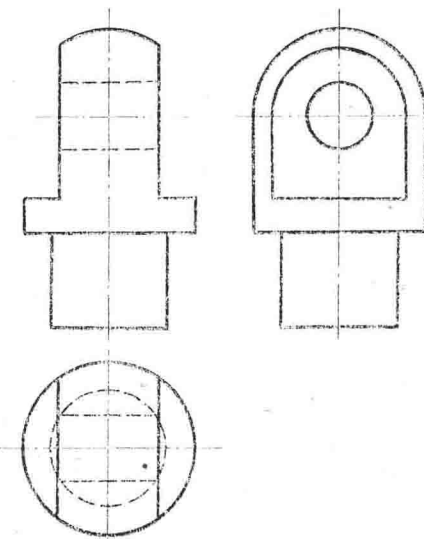
1



2



3

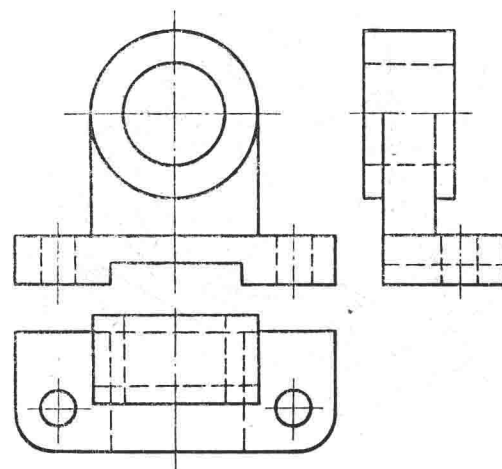


班级

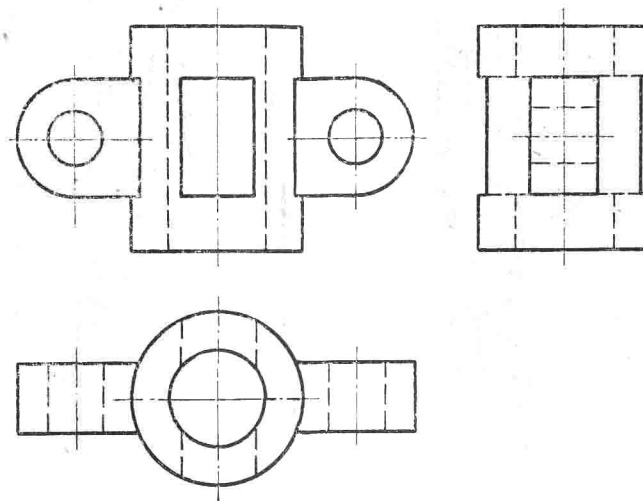
姓名

练习2—4, 2—5的答案。

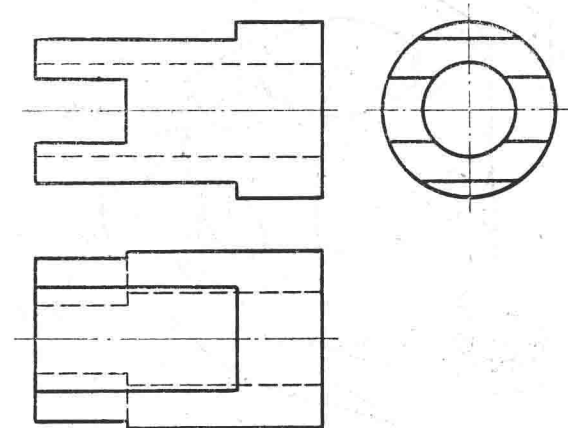
1



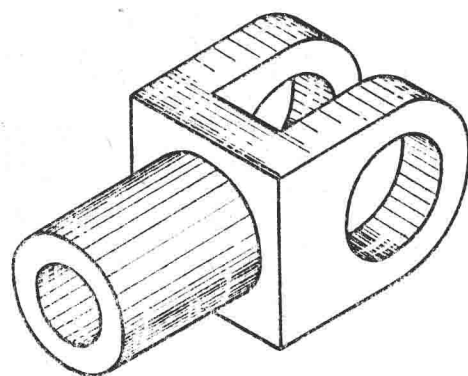
2



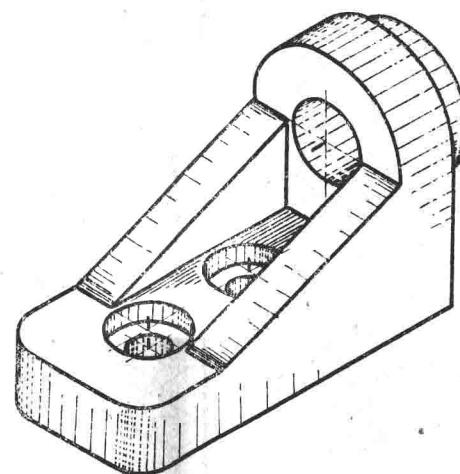
3



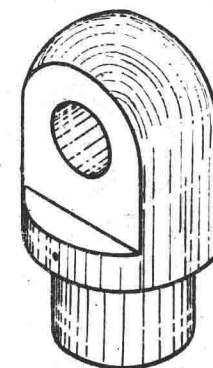
1



2



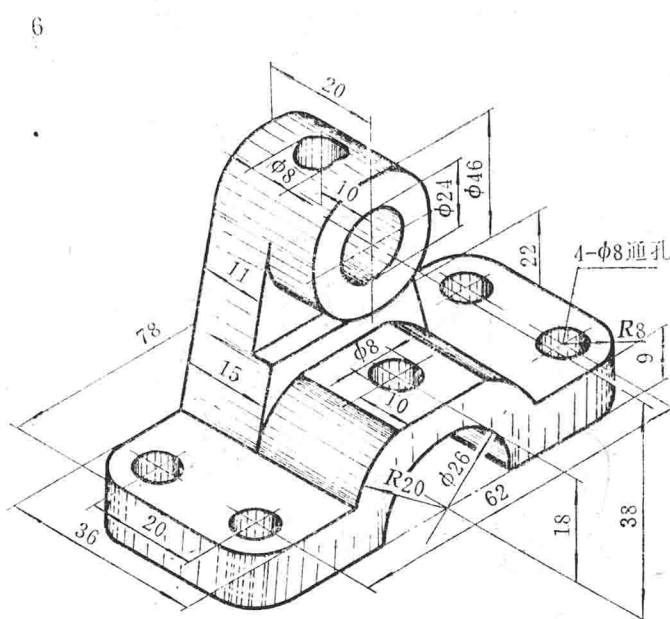
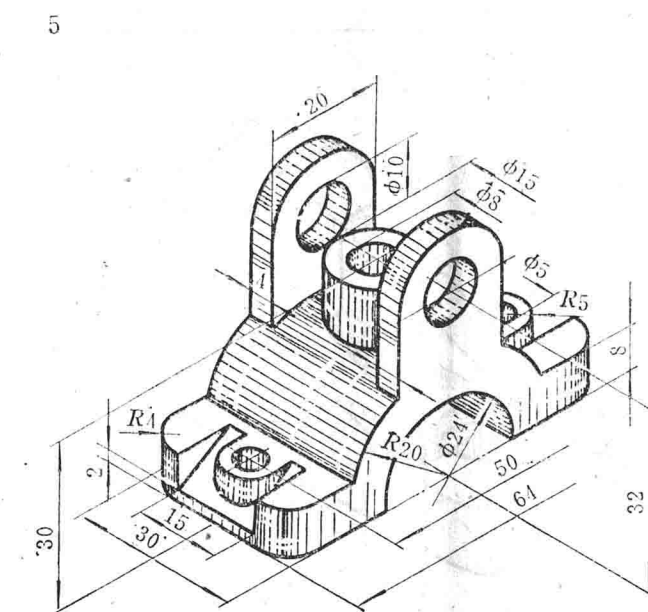
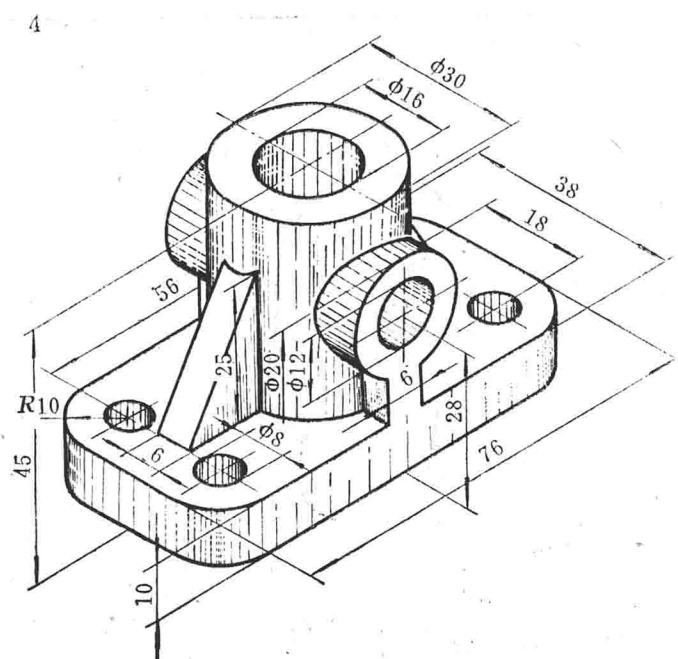
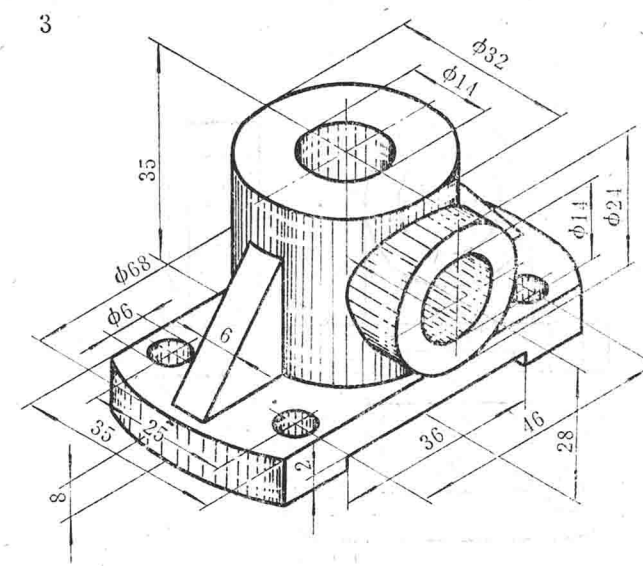
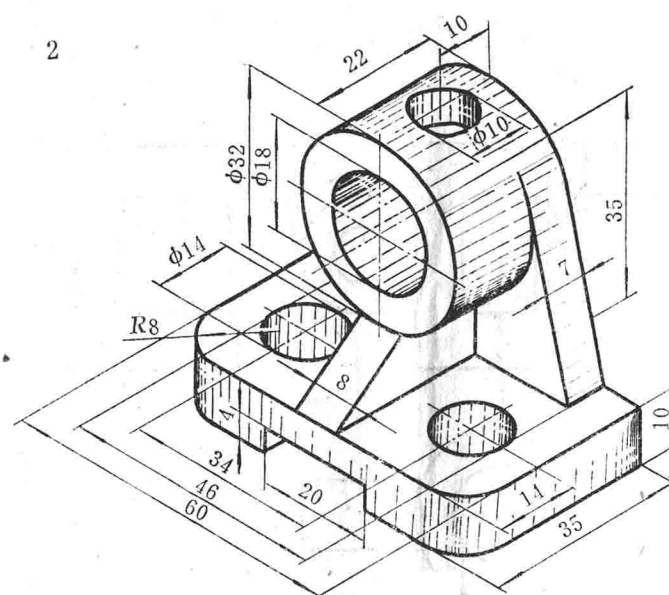
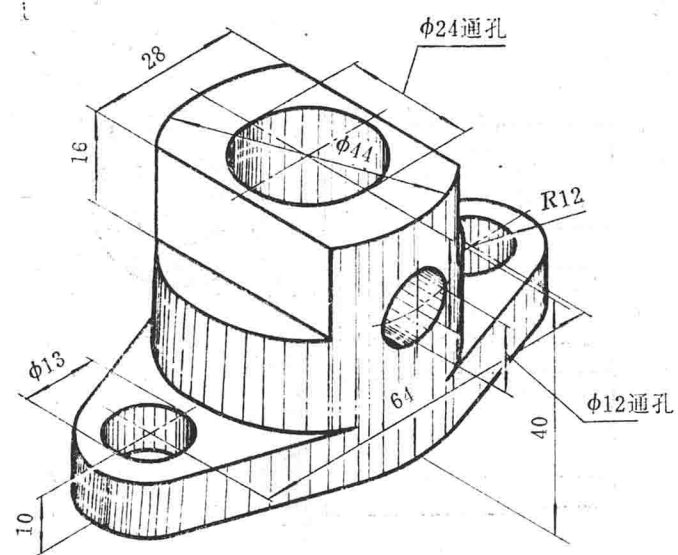
3



班级

姓名

2—6 根据立体图画出物体的三视图,并标注尺寸。

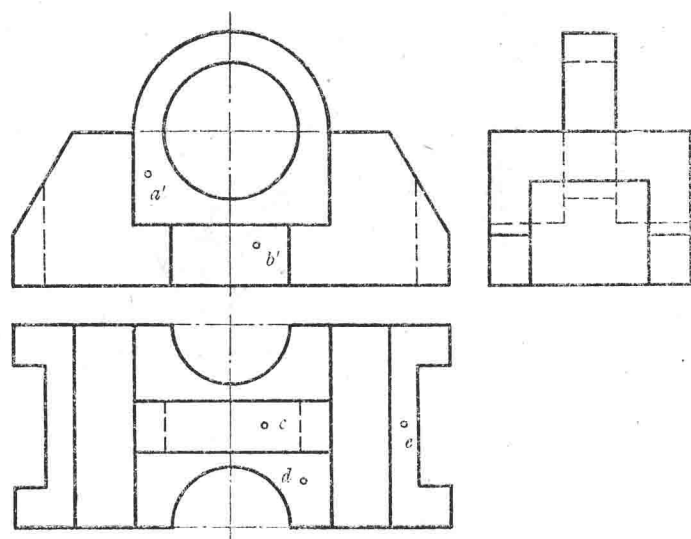


班级

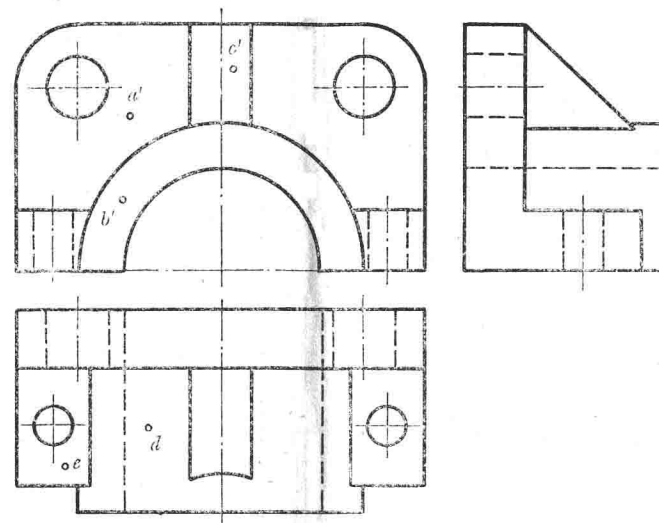
姓名

2—7 看懂下列物体的三视图，并求出物体表面上各点的其它投影。

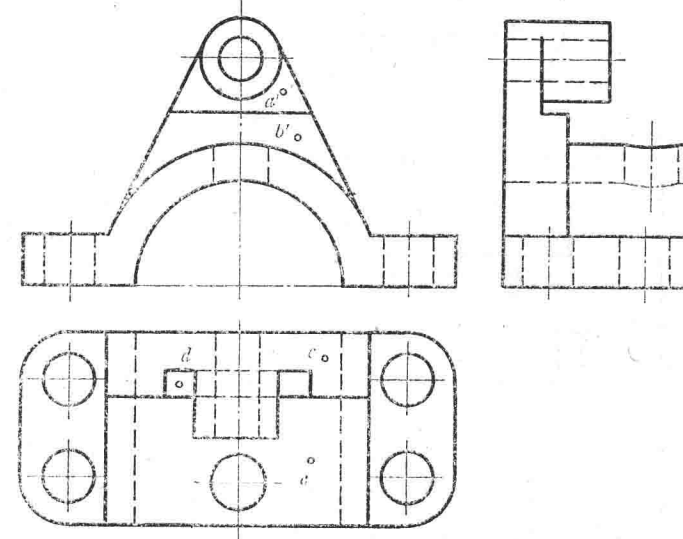
1



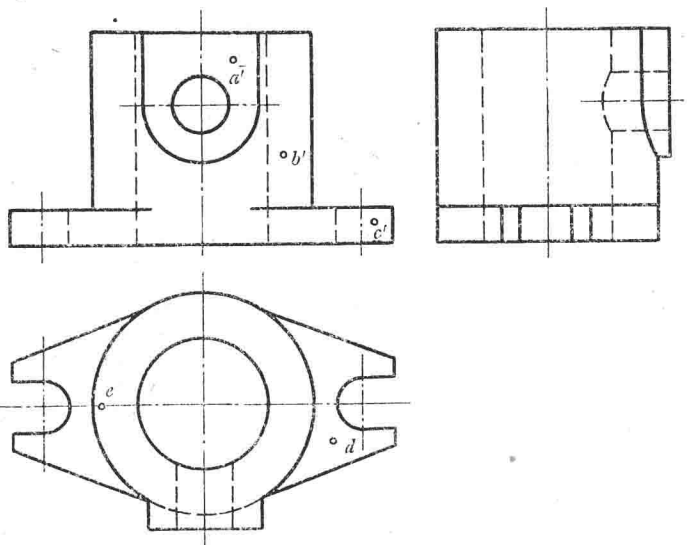
2



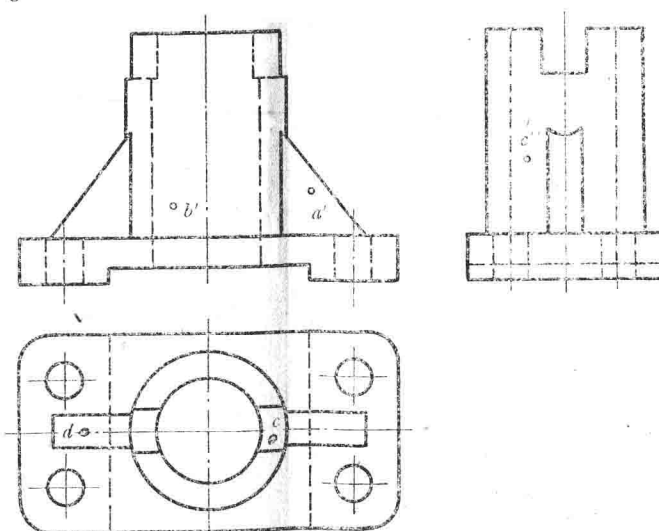
3



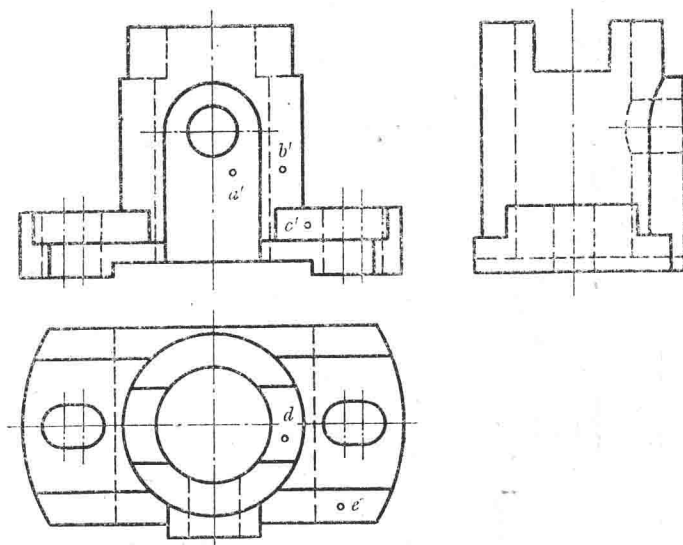
4



5

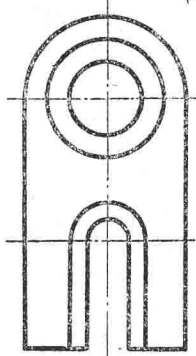
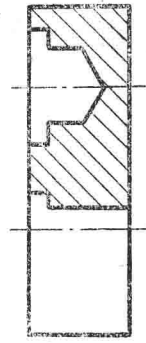


6

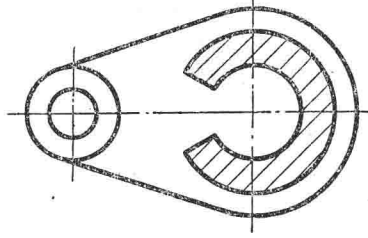
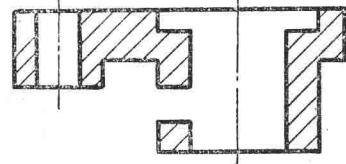


班级 姓名

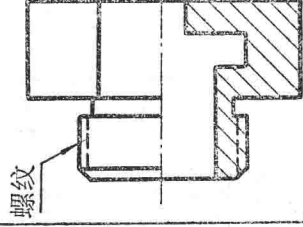
3-1 补画剖视图中的漏线。



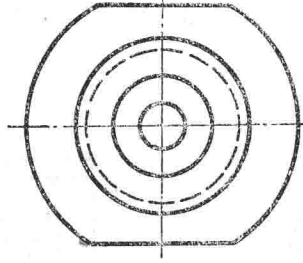
1



2



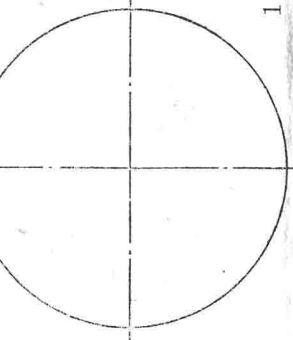
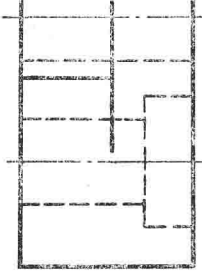
螺纹



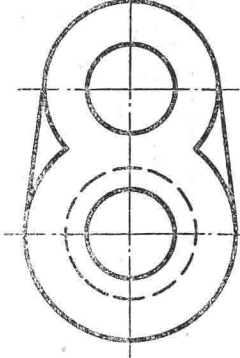
3-2 将主视图改画成全剖视图。



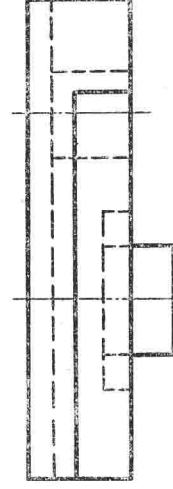
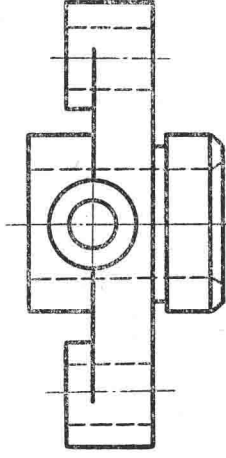
1



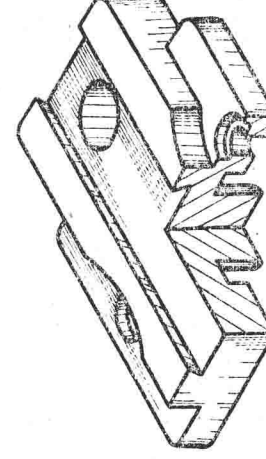
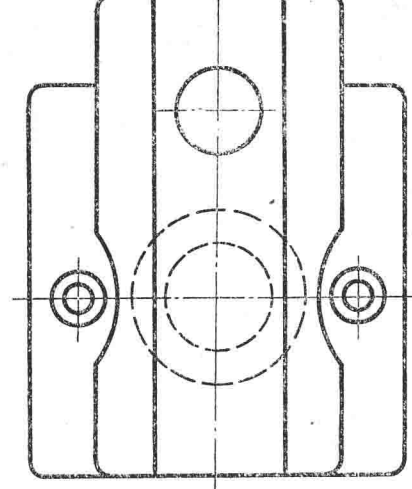
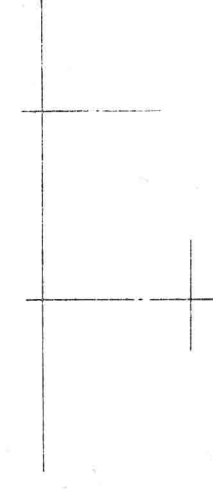
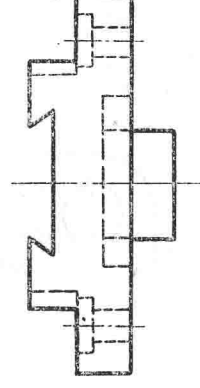
2



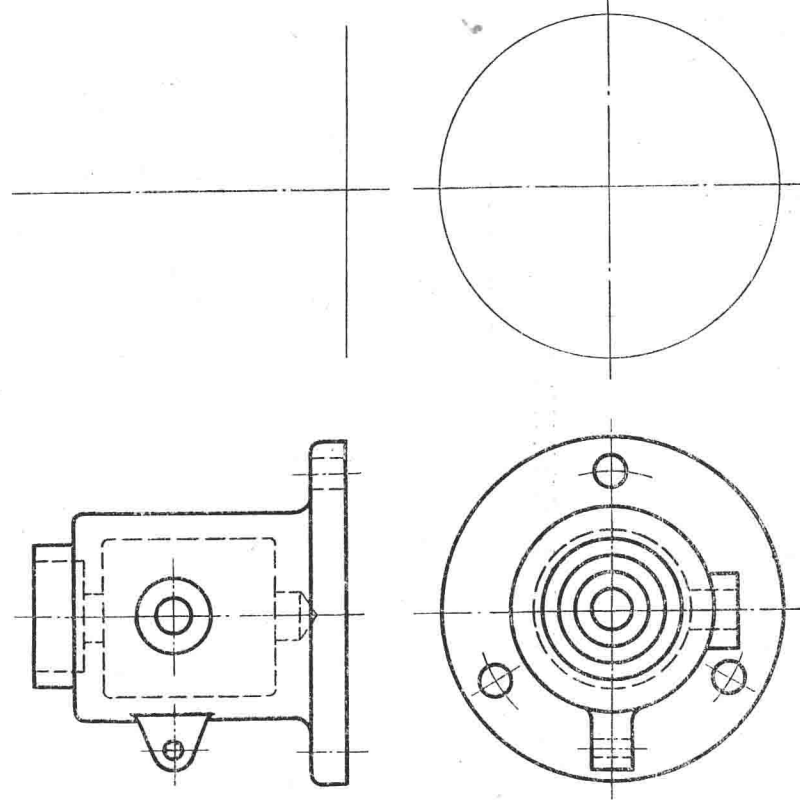
3-3 将主视图改画成半剖视。



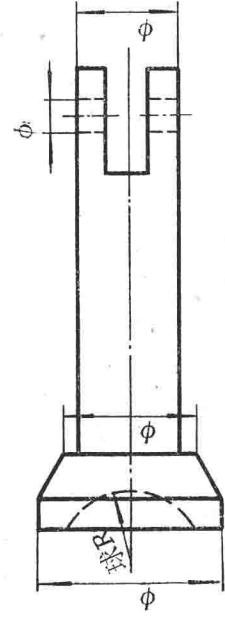
3-4 将主视图改画成全剖视，左视图改画成半剖视。



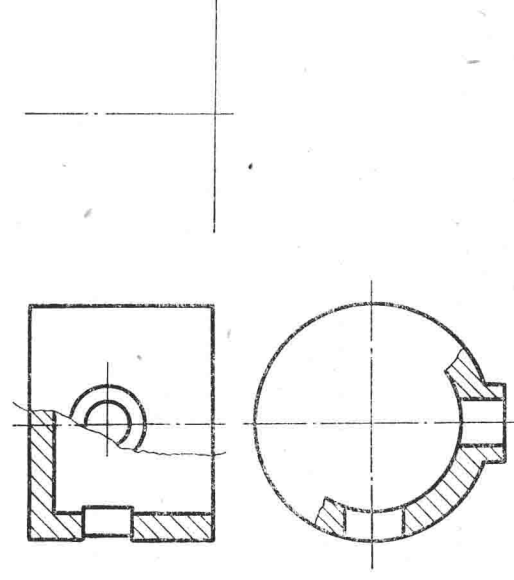
3—5 将主视图、俯视图改画成局部剖视图。



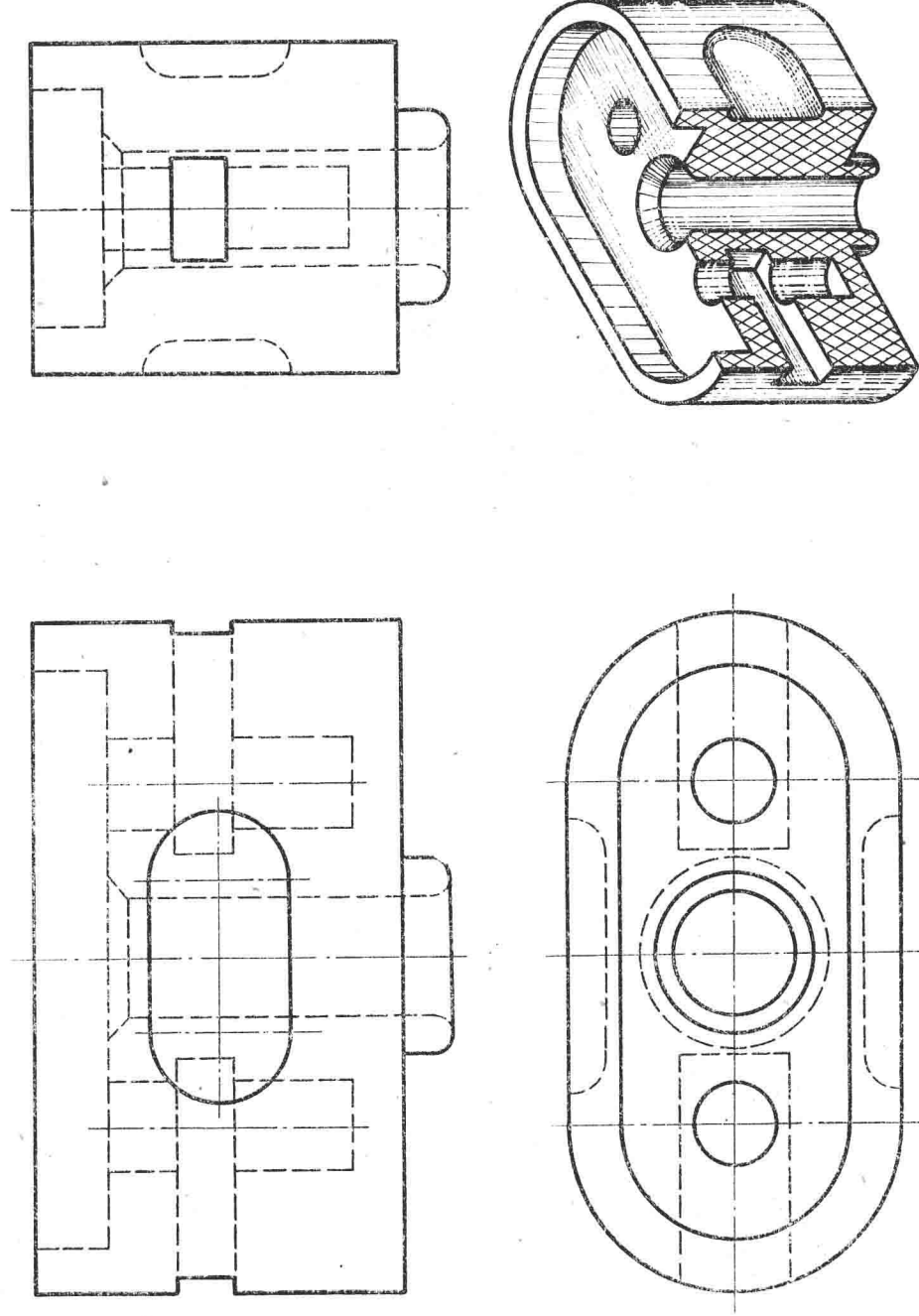
3—6 把下图改画成局部剖视。

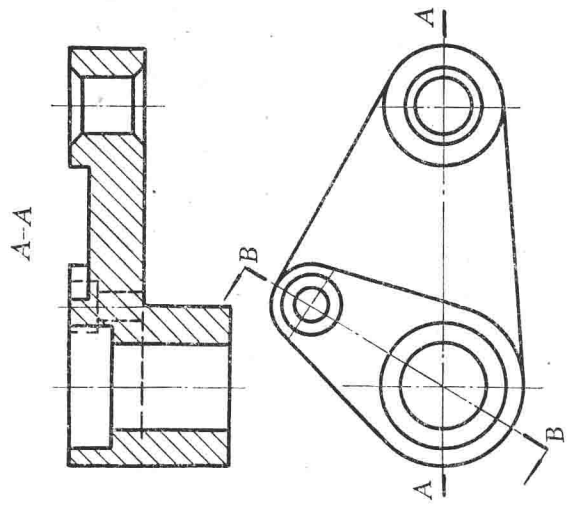
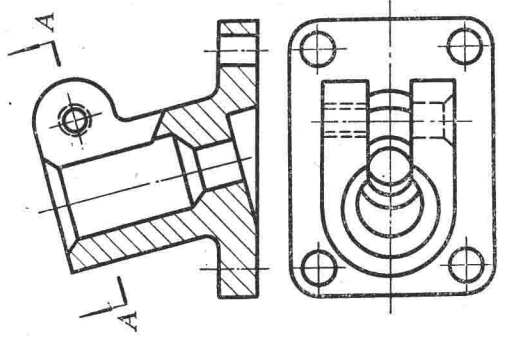
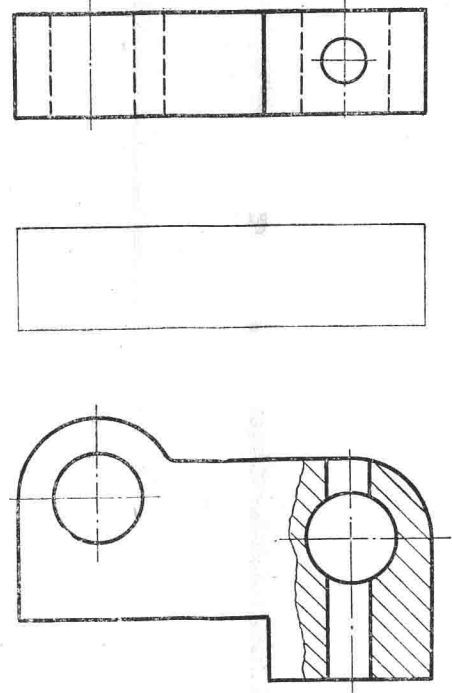
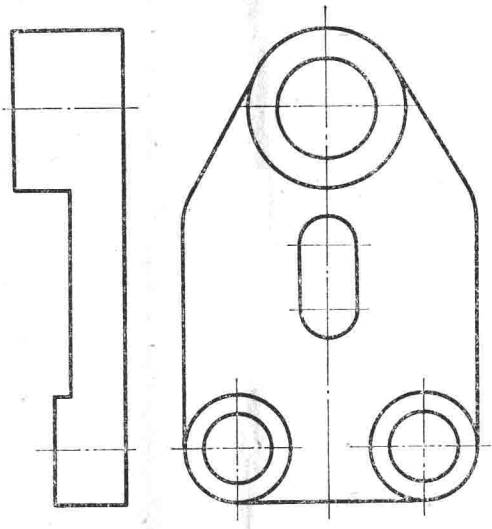
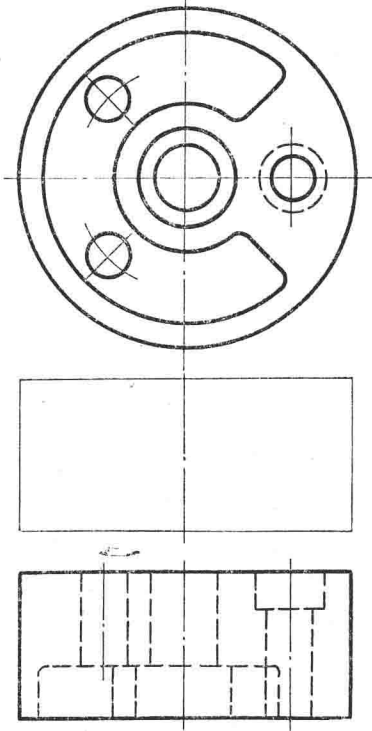
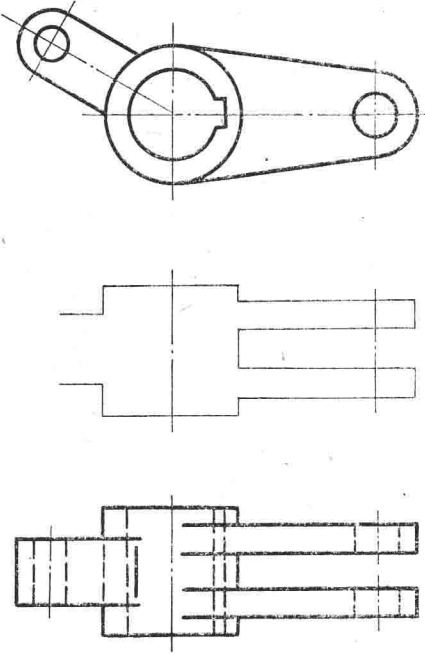


3—7 改正波浪线的错误，并补画左视图(局部剖视)。



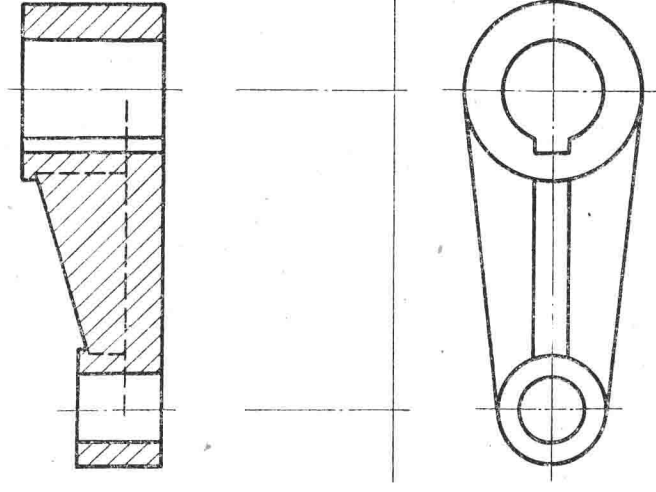
3—8 用3号图纸、放大2倍，将下列物体改画成半剖视，并标注尺寸。



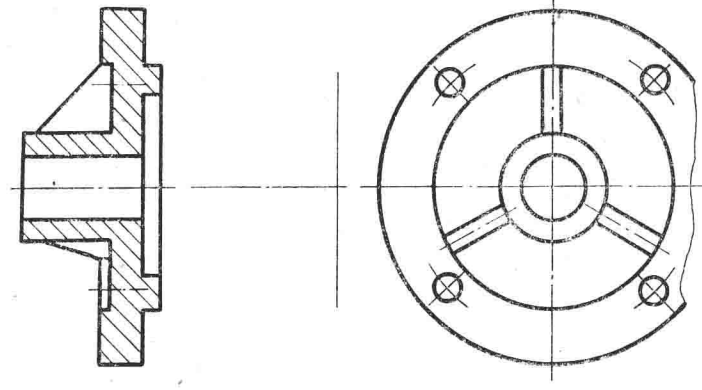
3—9 作B—B斜剖视图。 	3—10 作A-A斜剖视图。 
3—11 将主视图画成阶梯剖视图。 	3—12 将主视图画成阶梯剖视图。(图中四孔均为通孔) 
3—13 将主视图画成旋转剖视图。 	3—14 将主视图画成旋转剖视图。 

3—15 在主视图的下方，画出正确的剖视图。

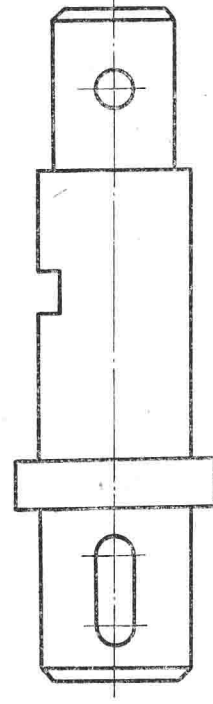
1



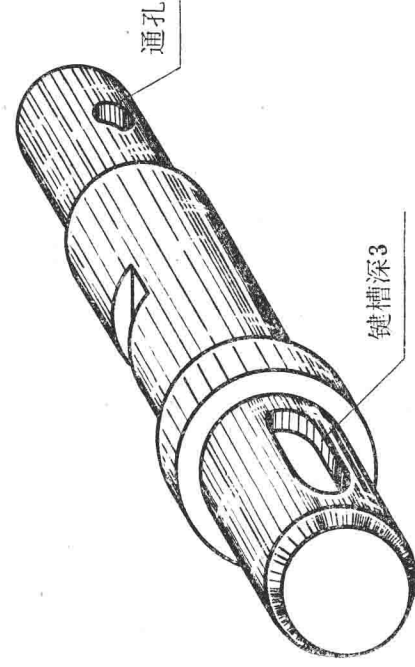
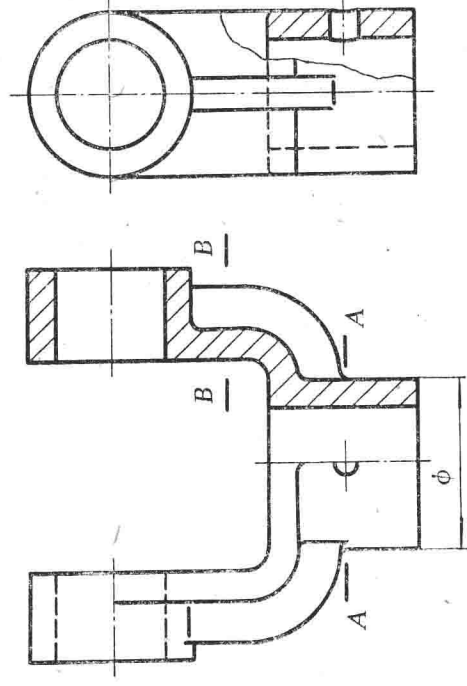
2



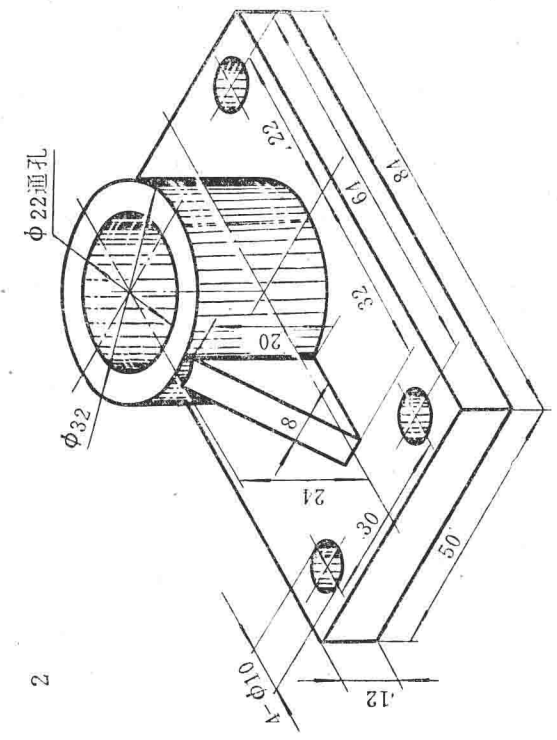
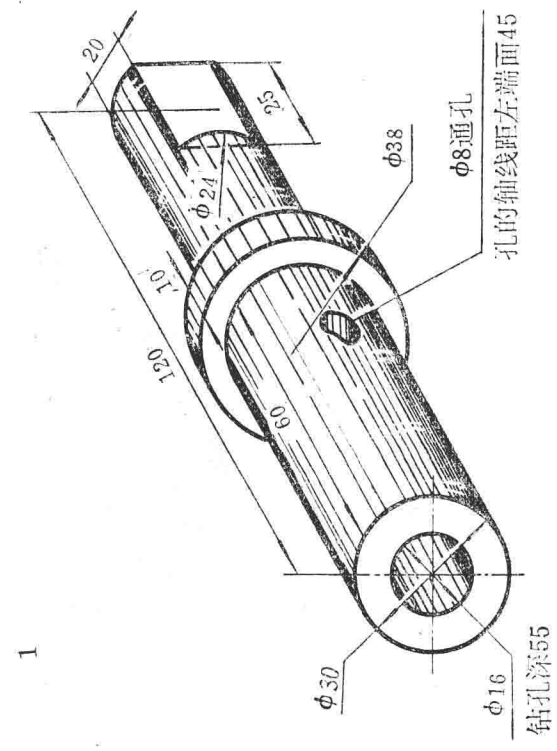
3—16 画出键槽、切口、小孔的剖面图。



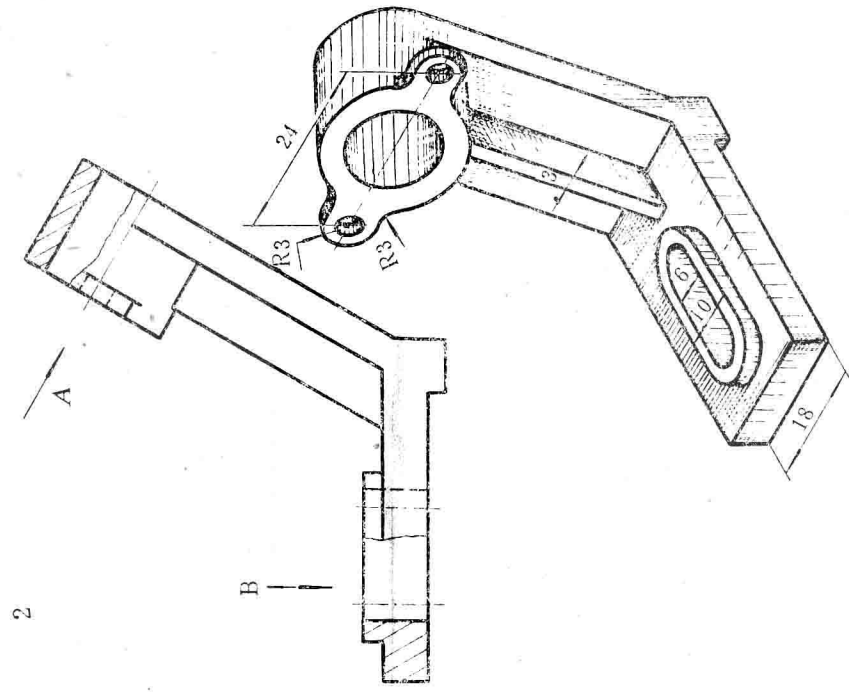
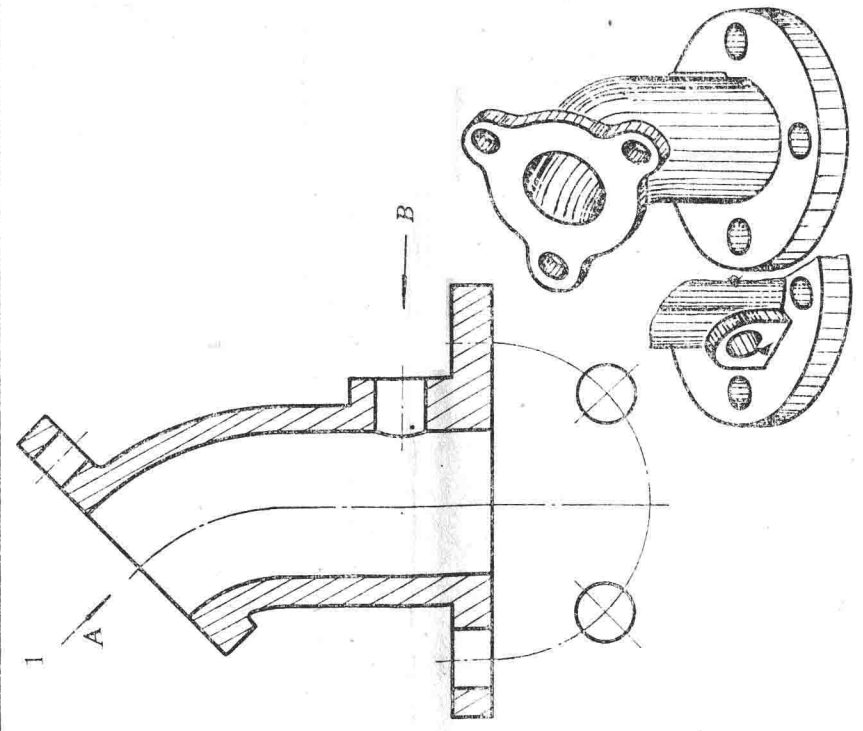
3—17 作A-A、B-B剖面图。



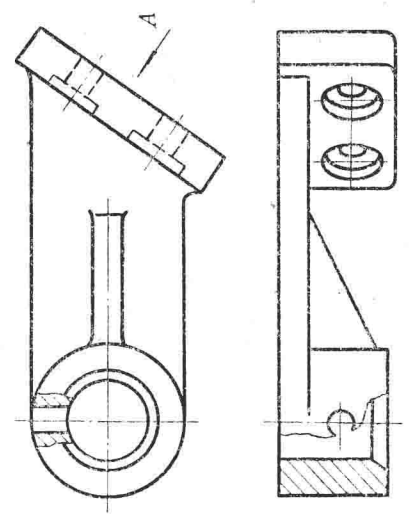
3-18 根据立体图，选用适当的剖视、剖面表达下列物体。



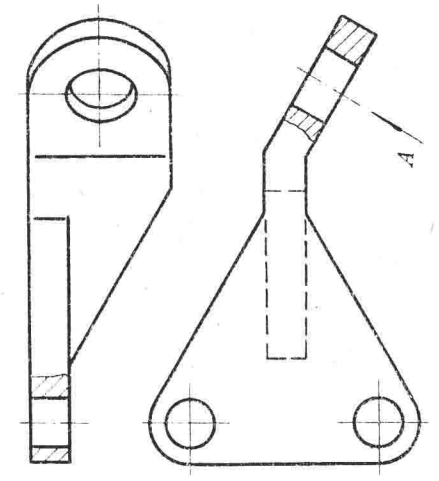
3-19 补画A向斜视图和B向局部视图。



3-20 作A向斜视图。

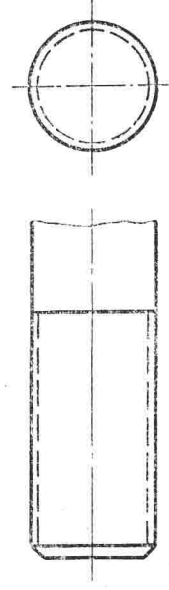


3-21 作A向斜视图，并将该图转平。

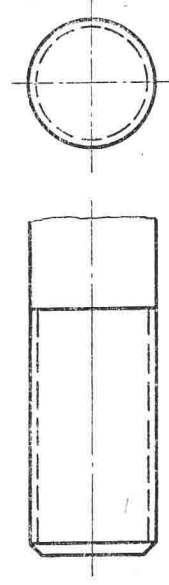


4-1 在下列各图中标注螺纹的规定代号及尺寸。

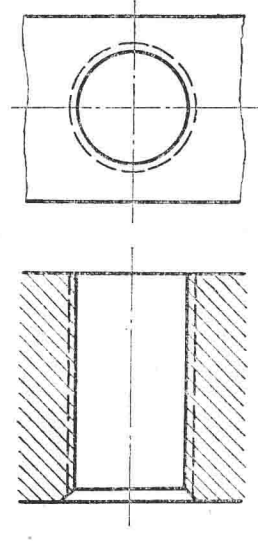
1. 粗牙螺纹, 外径20毫米, 螺距2.5毫米, 精度2级。



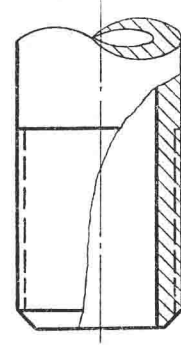
2. 细牙螺纹, 外径20毫米, 螺距0.75毫米, 左旋。



3. 梯形螺纹, 外径20毫米, 导程8毫米, 头数2。

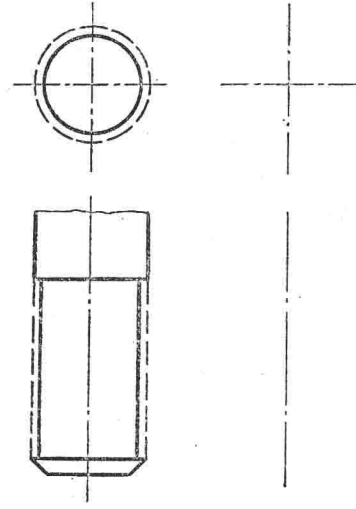


4. 圆柱管螺纹, 公称直径3/4"。

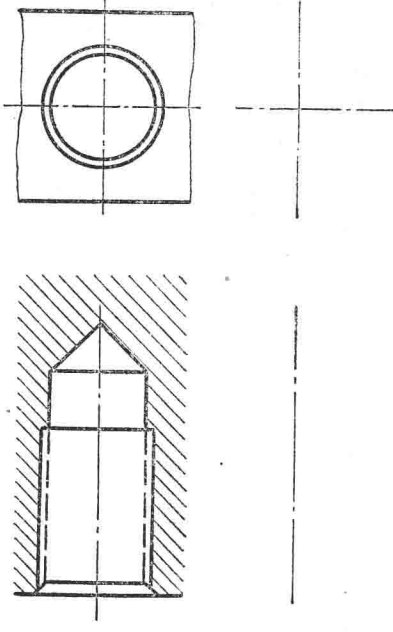


4-2 找出下列各图中的错误, 并把正确的画法画在点划线所示的位置。

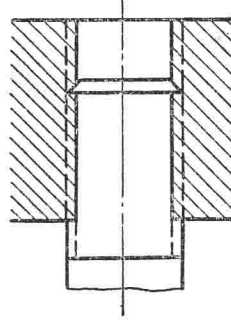
1.



2.



3.



4.

