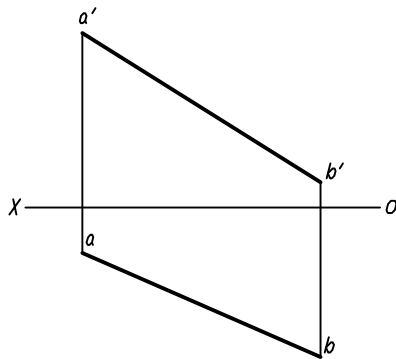
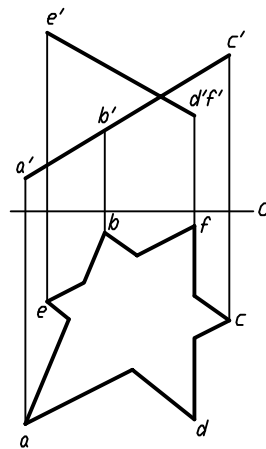


## 一、点、直线、平面的投影

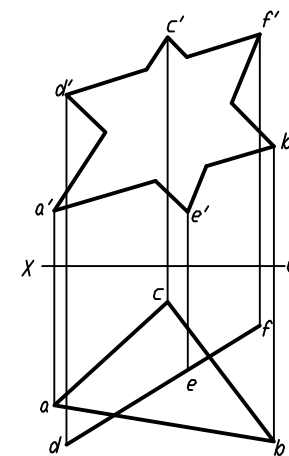
1. 用直角三角形法求直线 $AB$ 的实长及其对 $H$ 面、 $V$ 面的倾角 $\alpha, \beta$ 。



2. 作出 $\triangle ABC$  和 $\triangle DEF$ 的交线 $MN$ , 并判别可见性。

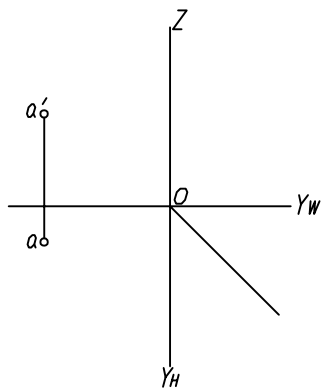


3. 作出 $\triangle ABC$  和 $\triangle DEF$ 的交线 $MN$ , 并判别可见性。

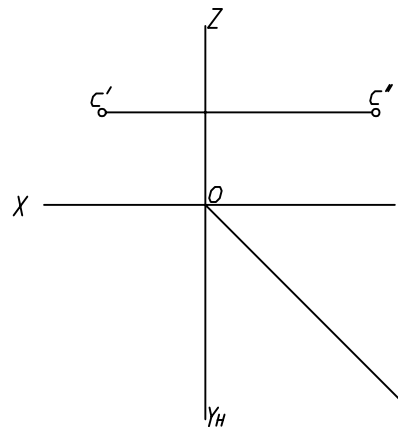


4. 求作直线的三面投影。

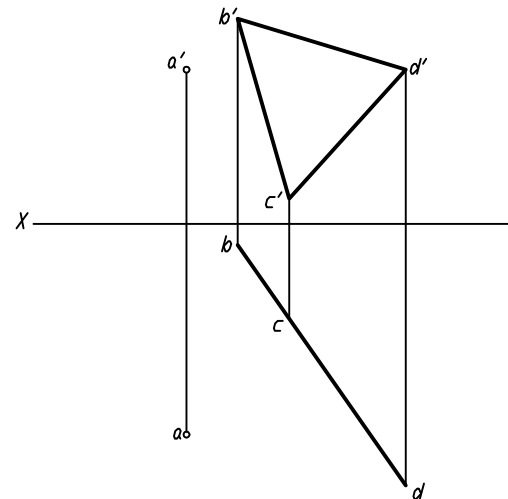
(1) 直线 $AB$ 为水平线, 长15, 且点 $B$ 在点 $A$ 右前方,  $\beta=30^\circ$ 。



(2) 直线 $CD$ 为正垂线, 长15, 且点 $D$ 在点 $C$ 之后。

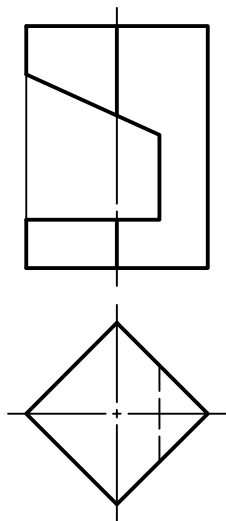


5. 由点 $A$ 作 $\triangle BCD$ 的垂线,  $AK$ 为垂线,  $K$ 为垂足, 并标出点 $K$ 到 $\triangle BCD$ 的真实距离。由点 $A$ 作平面 $P$ 平行 $\triangle BCD$ ; 由点 $A$ 作铅垂面 $P \perp \triangle BCD$ ; 平面 $P, Q$ 用迹线表示。

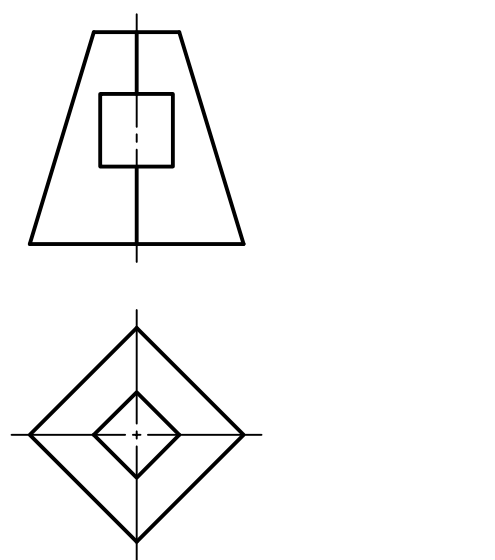


## 二、立体的投影

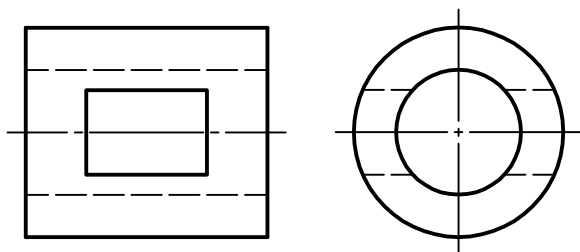
1. 求左视图。



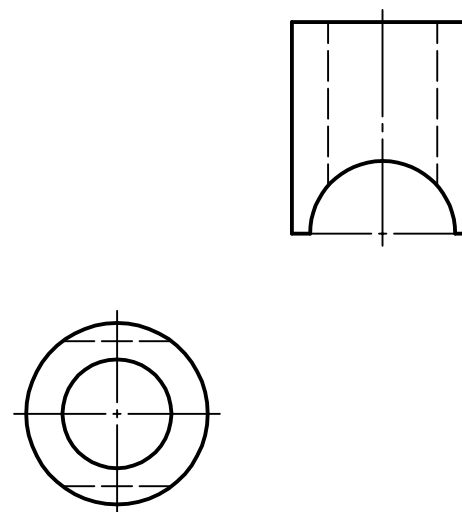
2. 补全俯视图并画出左视图。



3. 求俯视图。

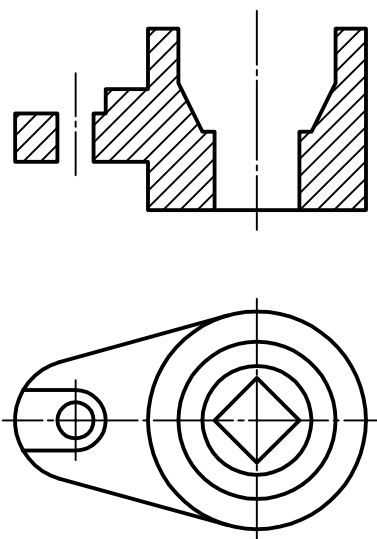


4. 求主视图。

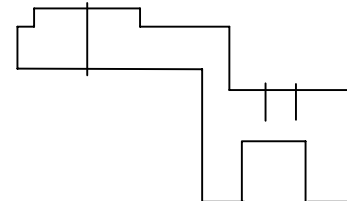
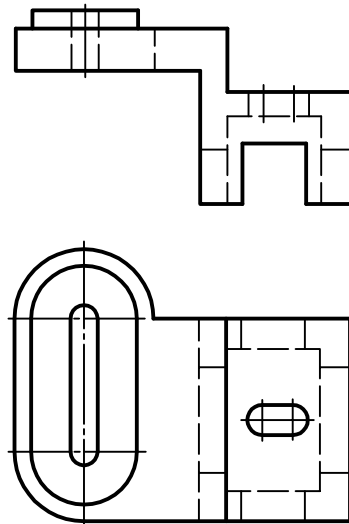


## 二、机件的图样画法

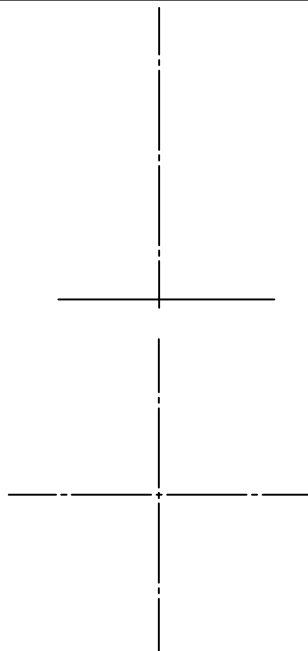
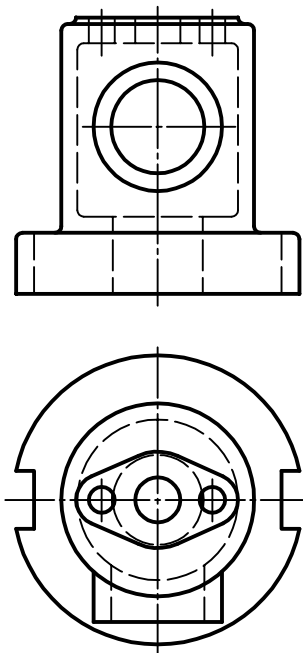
1. 补画缺少的图线。



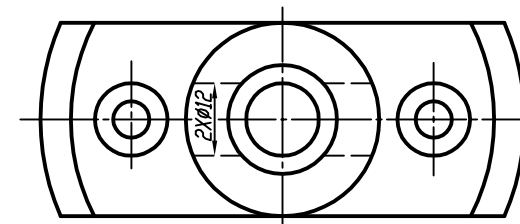
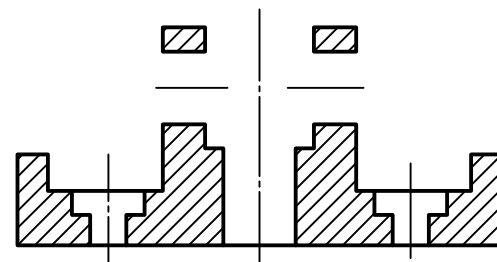
2. 仕指定位置把主视图画成全剖视图。



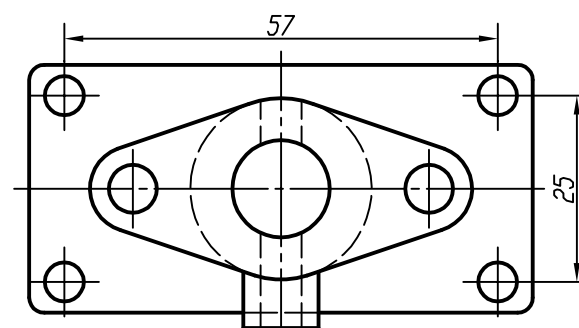
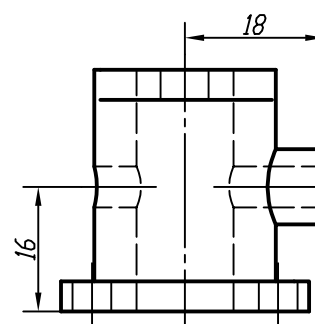
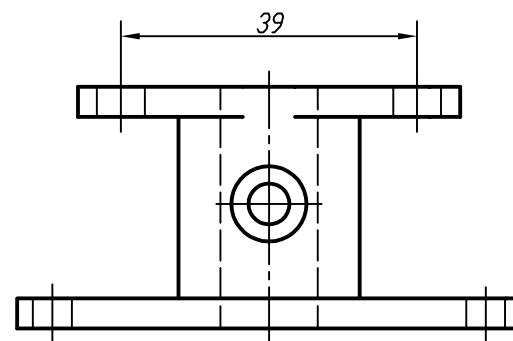
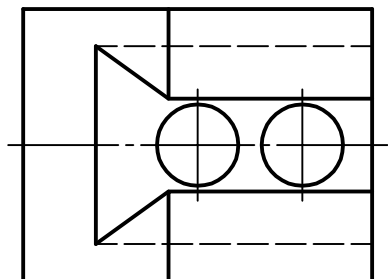
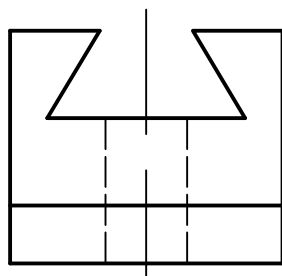
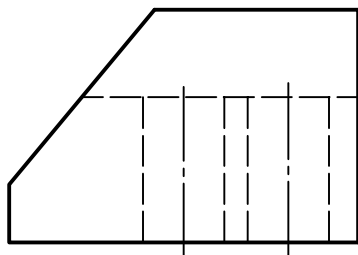
3. 把主、俯视图画成半剖视。



4. 补画缺少的图线。

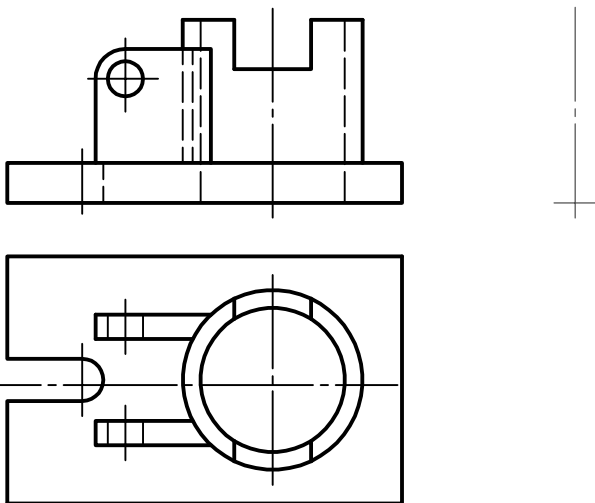


#### 四、尺寸标注（长度取整）

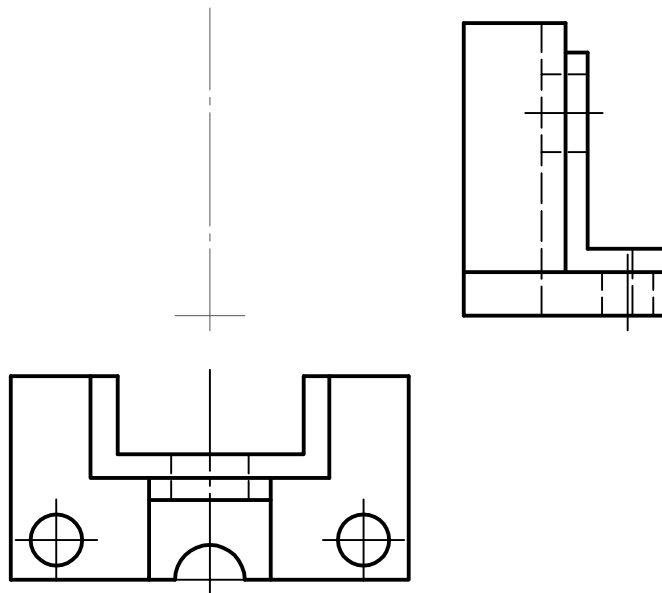


## 五、组合体三视图

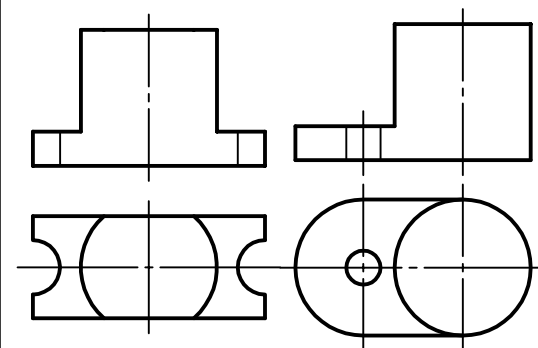
1. 求左视图。



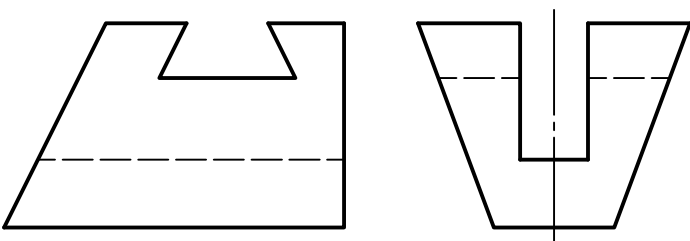
2. 求主视图。



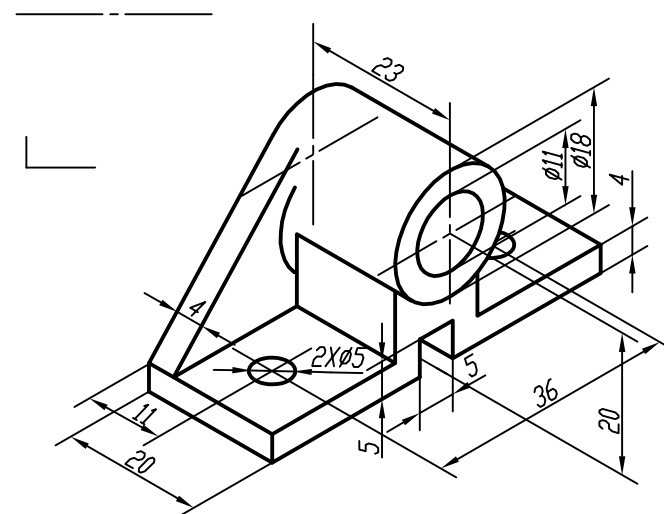
3. 补全缺少的图线。



4. 求俯视图。

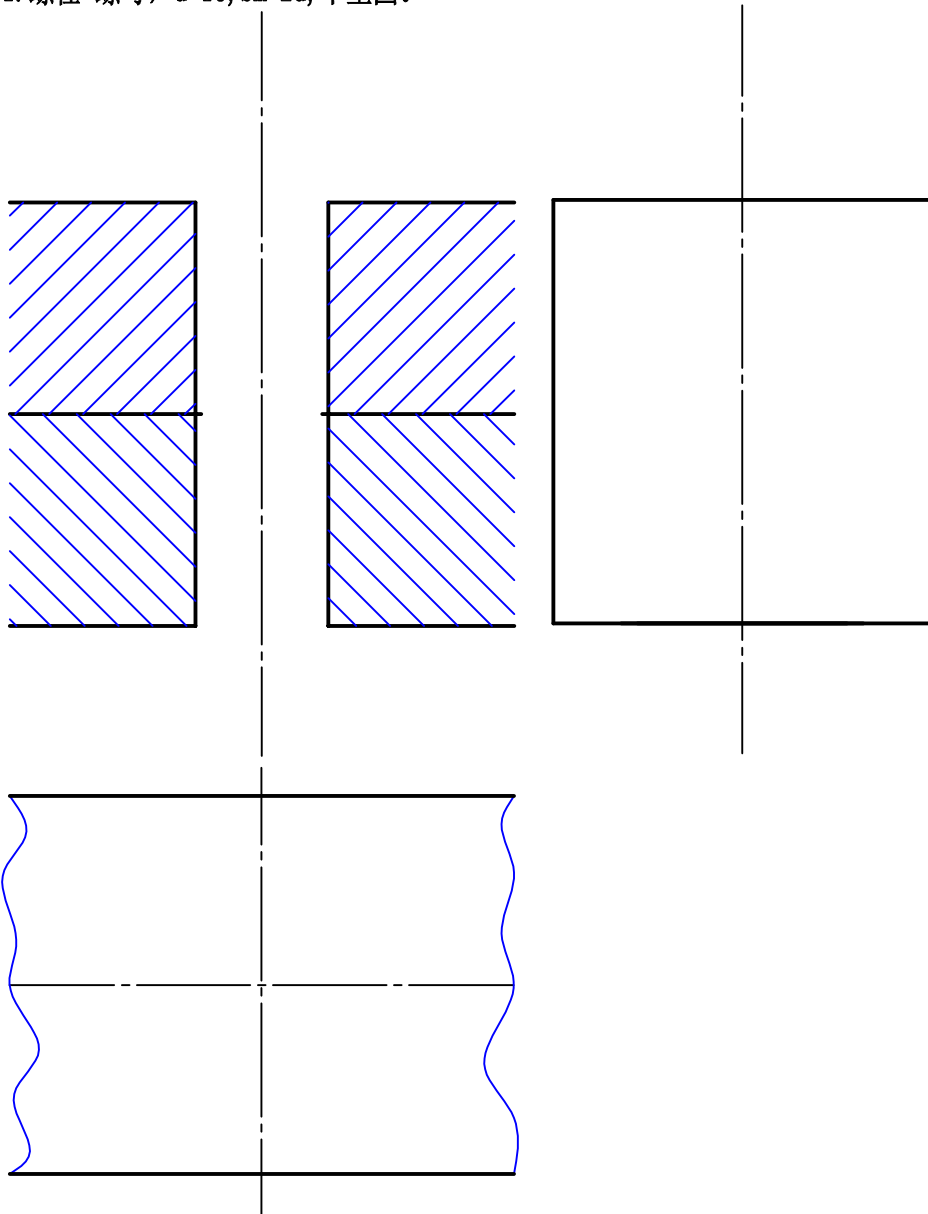


4. 根据轴测图画三视图并标注尺寸。

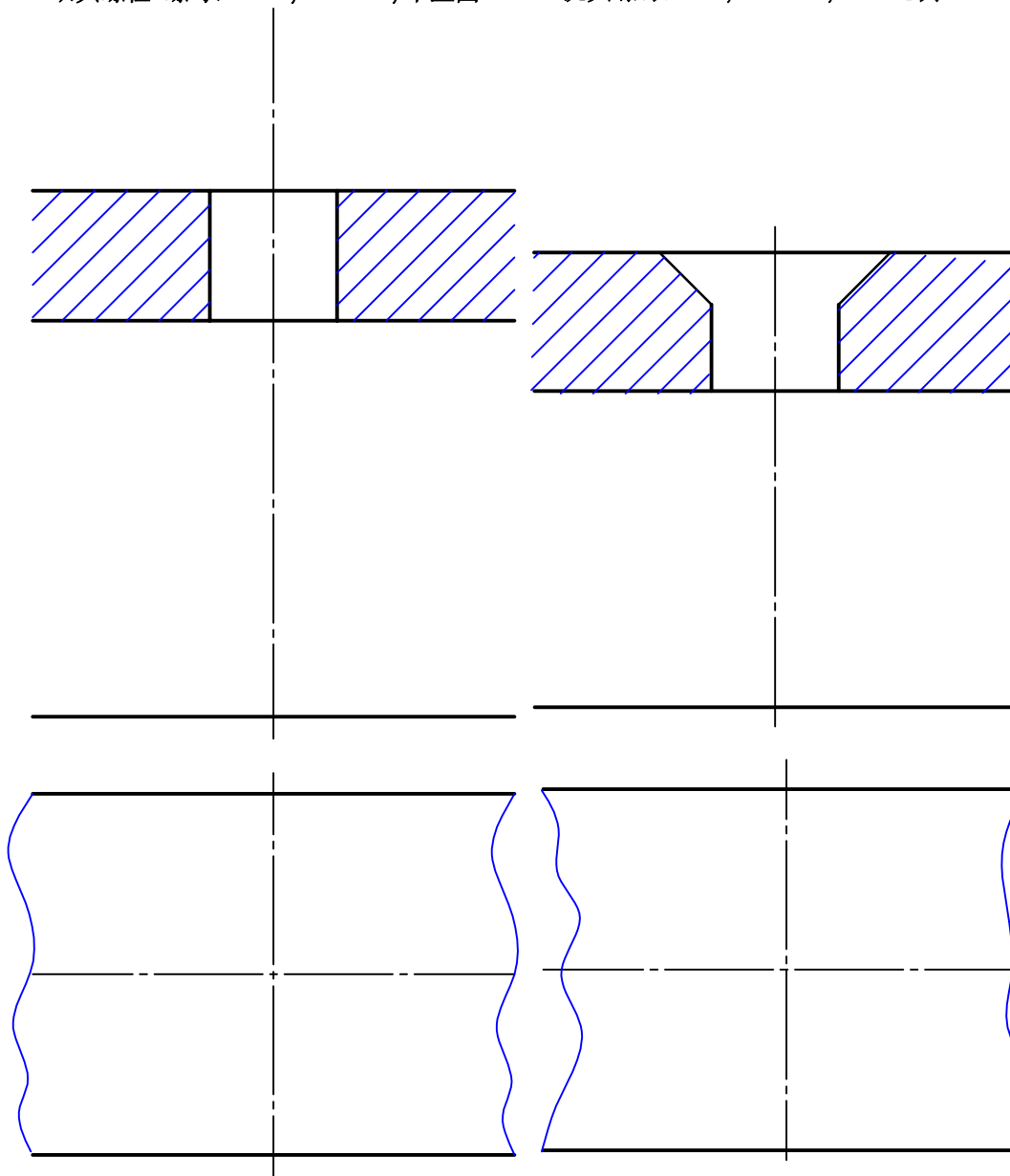


## 六、螺纹紧固件

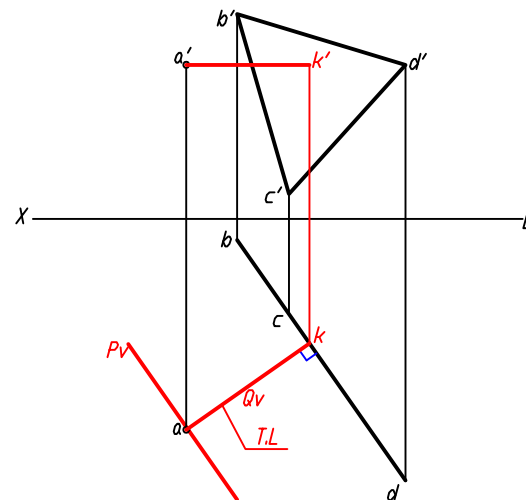
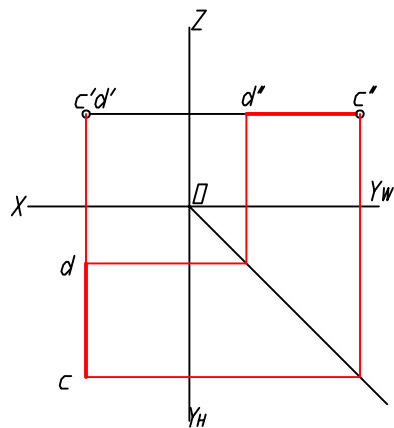
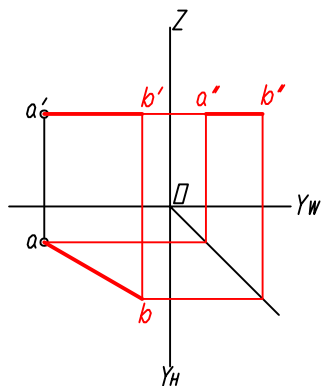
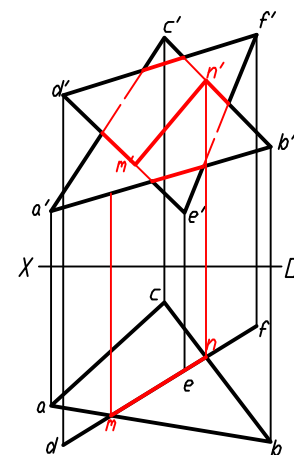
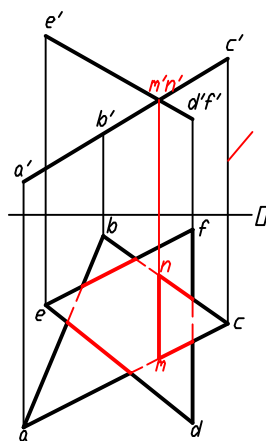
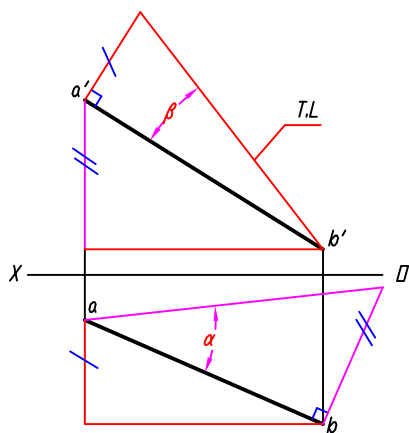
1. 螺栓 螺母,  $d=16$ ,  $b_m=2d$ , 平垫圈。



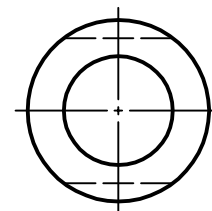
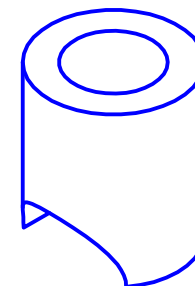
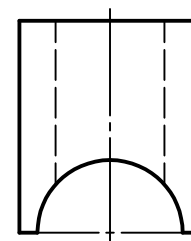
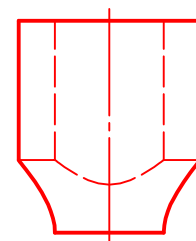
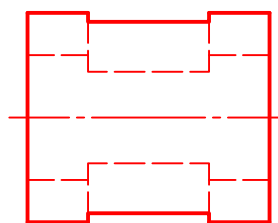
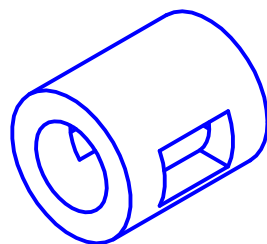
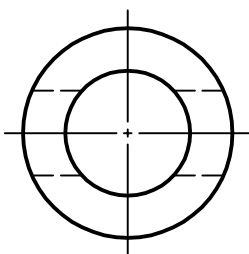
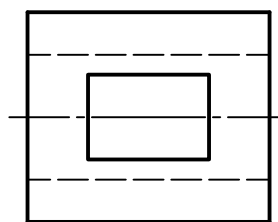
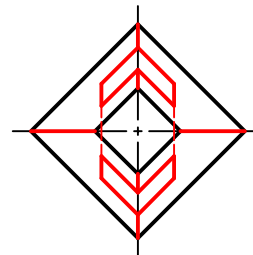
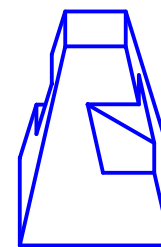
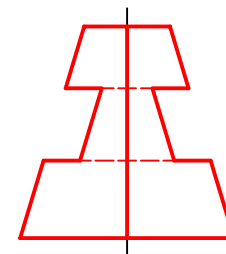
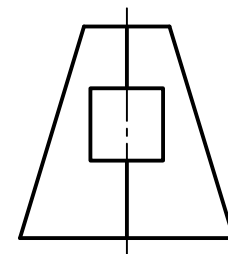
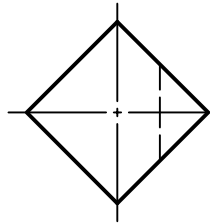
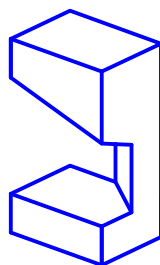
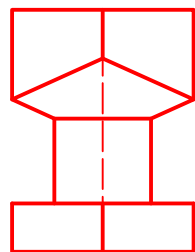
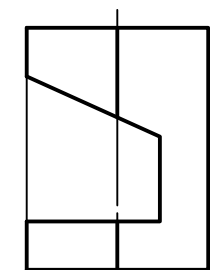
2. 双头螺柱 螺母,  $d=16$ ,  $b_m=1.5d$ , 平垫圈。 3. 沉头螺钉,  $d=8$ ,  $b_m=1.5d$ , 2:1 比例。



# 一、点、直线、平面的投影-答案

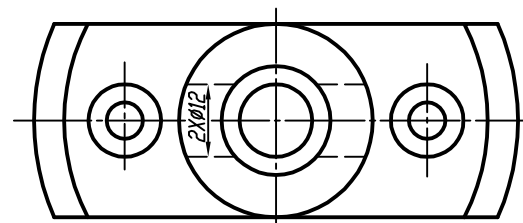
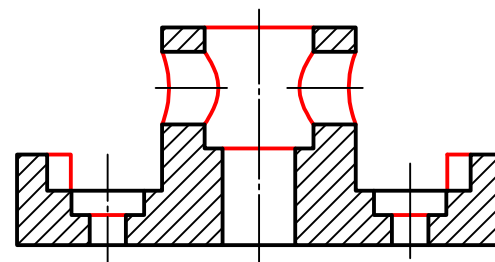
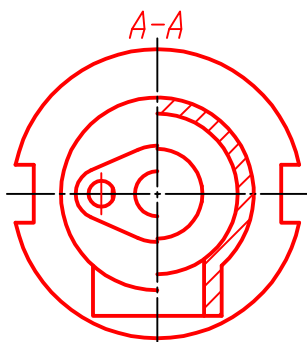
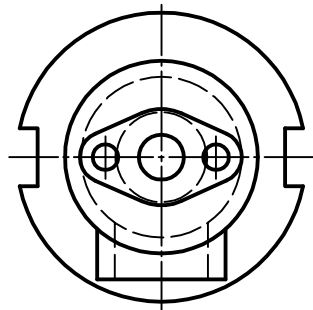
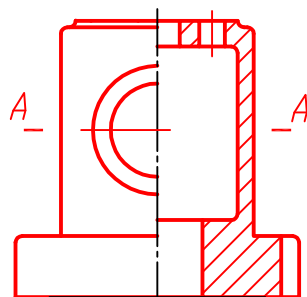
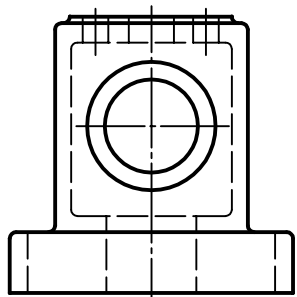
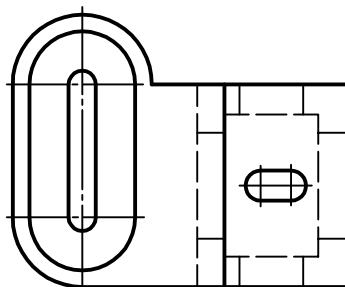
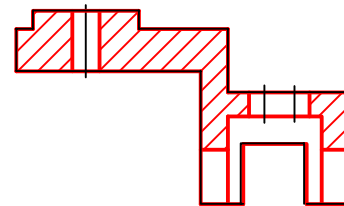
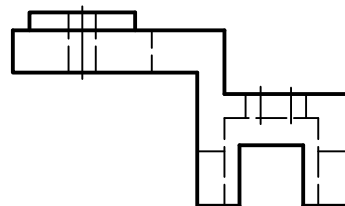
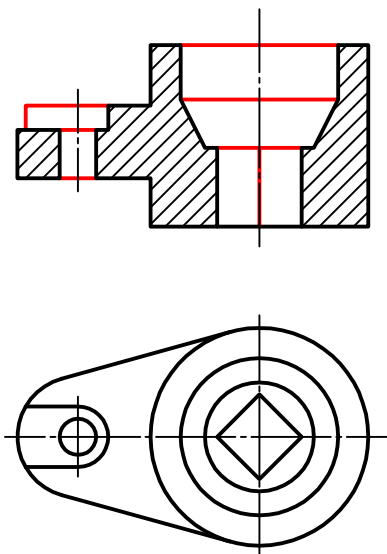


## 二、立体的投影-答案

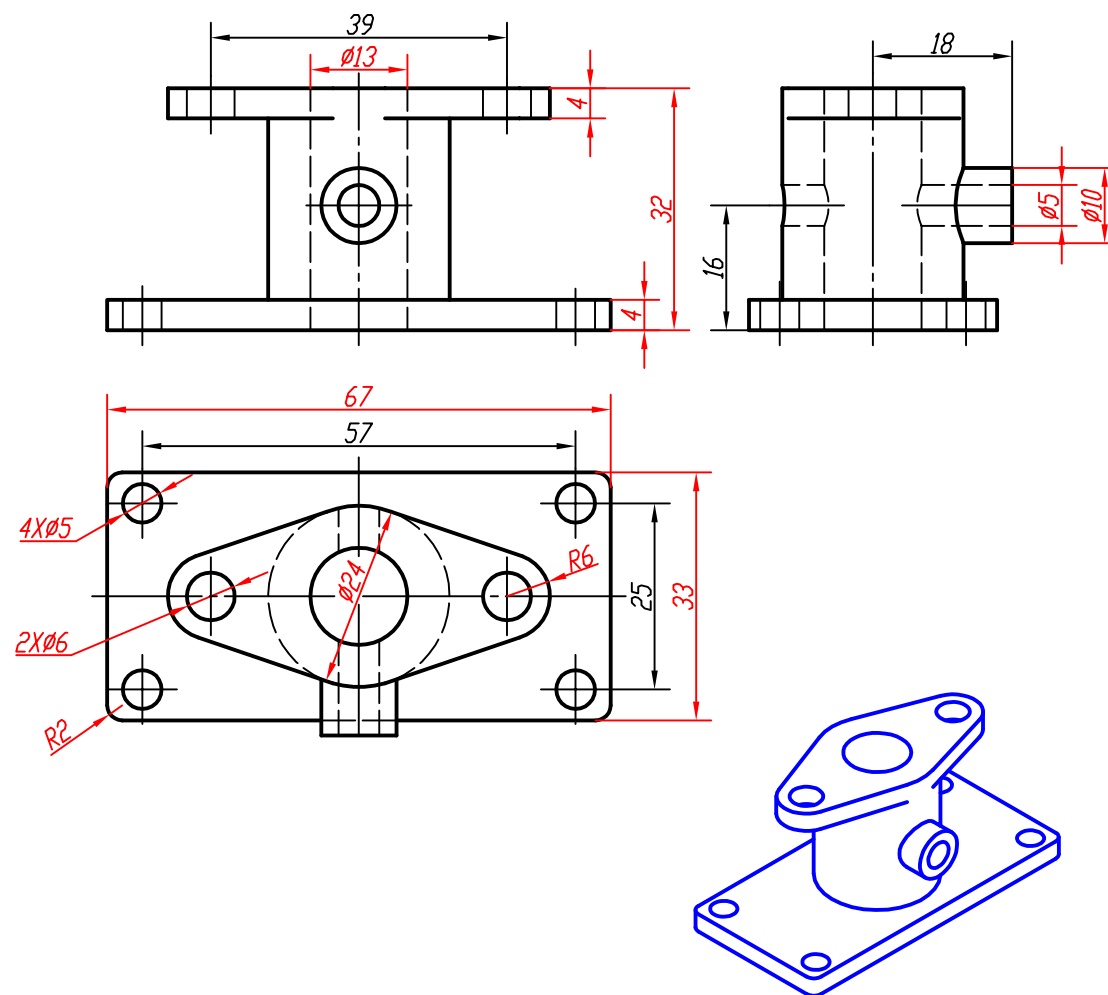
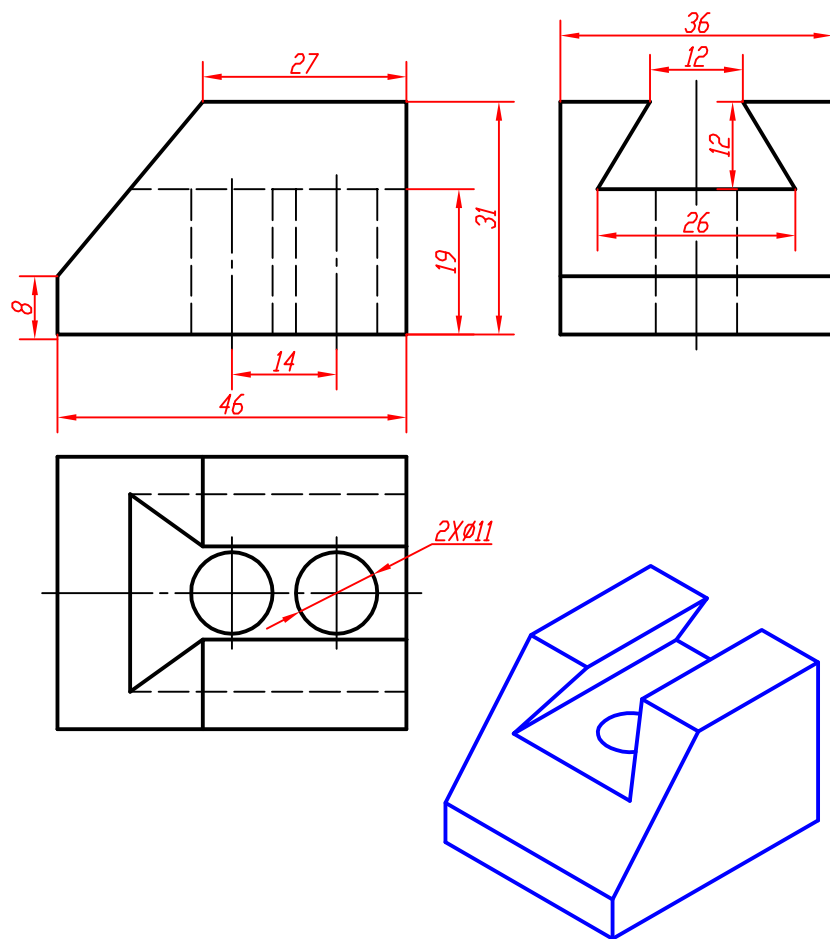




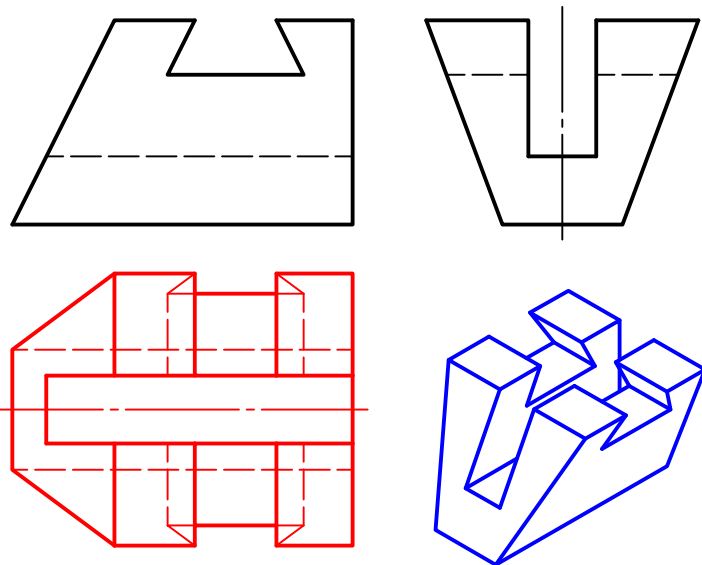
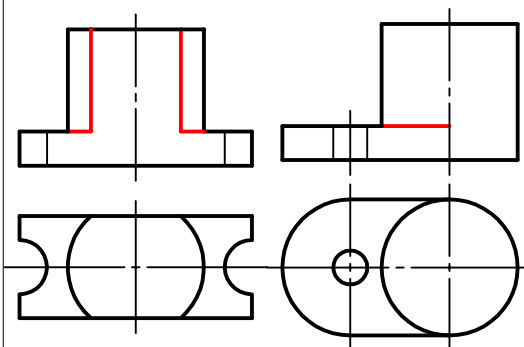
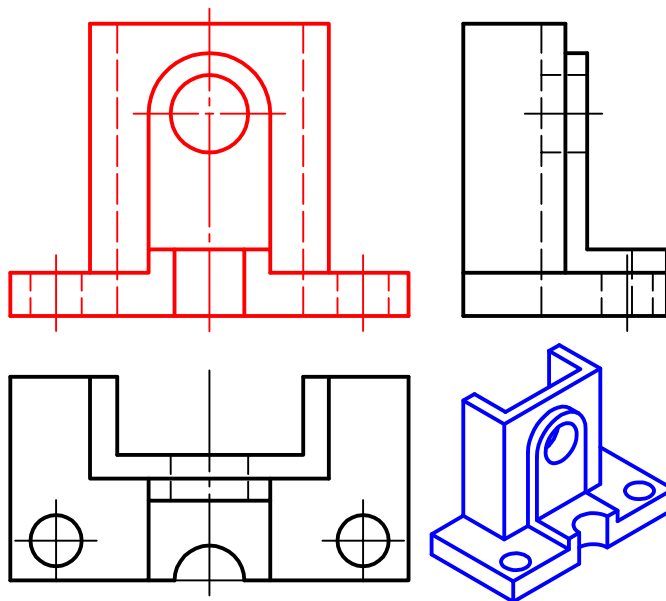
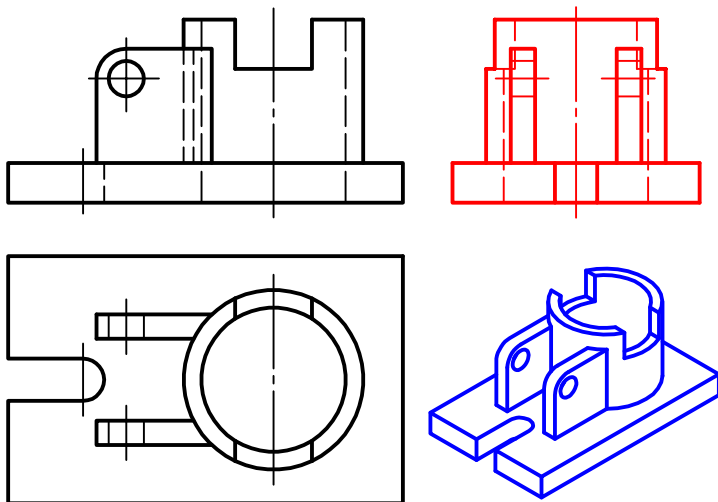
### 三、机件的图样画法-答案



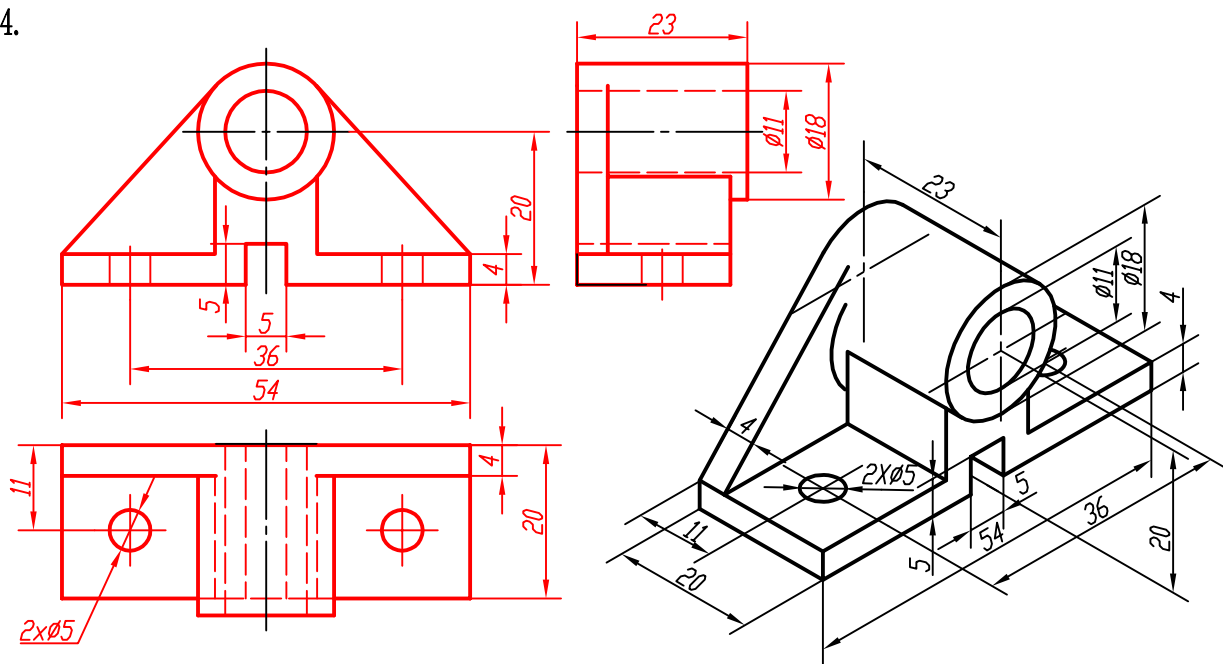
#### 四、尺寸标注-答案



# 五、组合体三视图-答案



4.



## 六、螺纹紧固件-答案

