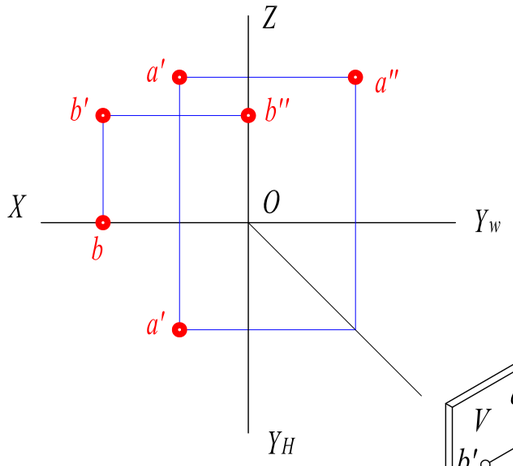
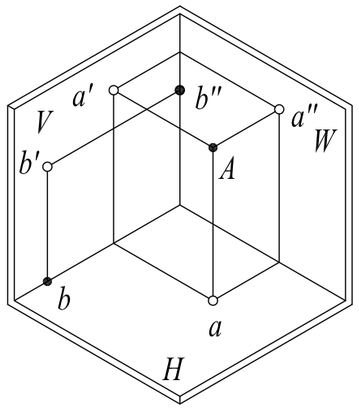
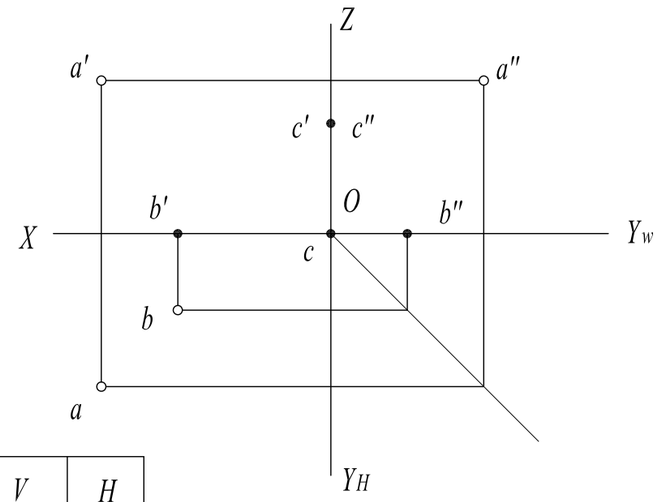
1. 由立体图作*A*、*B*两点的三面投影图，并将它们的坐标值填入下面的表格（从立体图中直接量取毫米取整）。





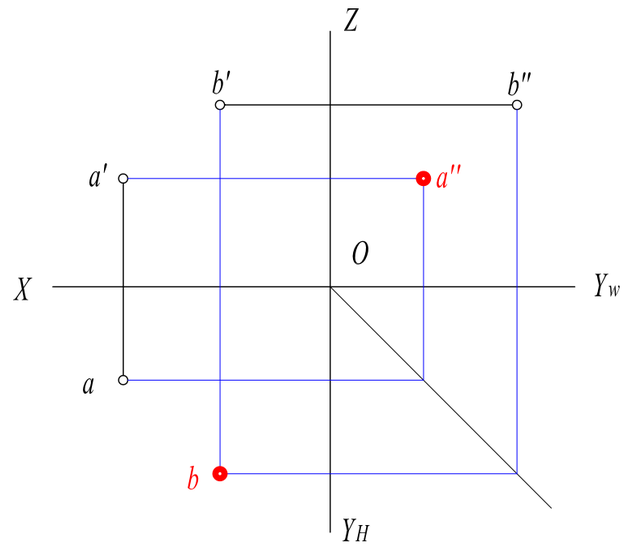
	X	Y	Z
A	9	14	19
B	19	0	14

2. 已知各点的三面投影图，将它们离各投影面的距离填入下面的表格（从图中量取毫米取整）。

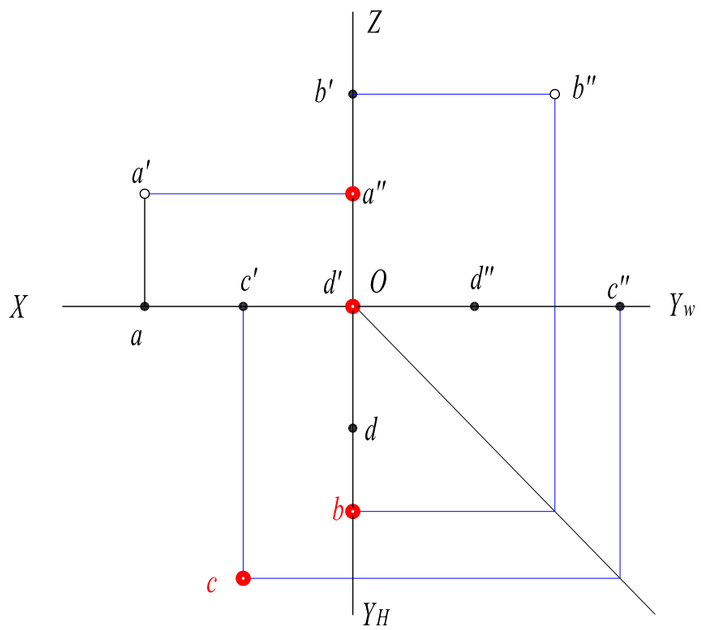


	W	V	H
A 距	30	20	20
B 距	20	10	0
C 距	0	0	14

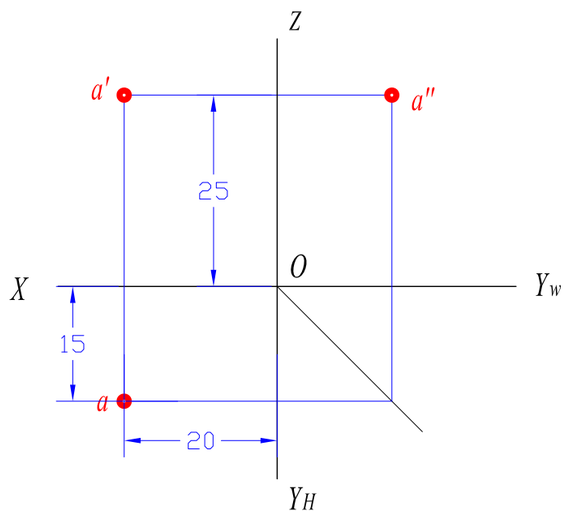
3. 已知*A*、*B*两点的两面投影，求它们第三面投影。



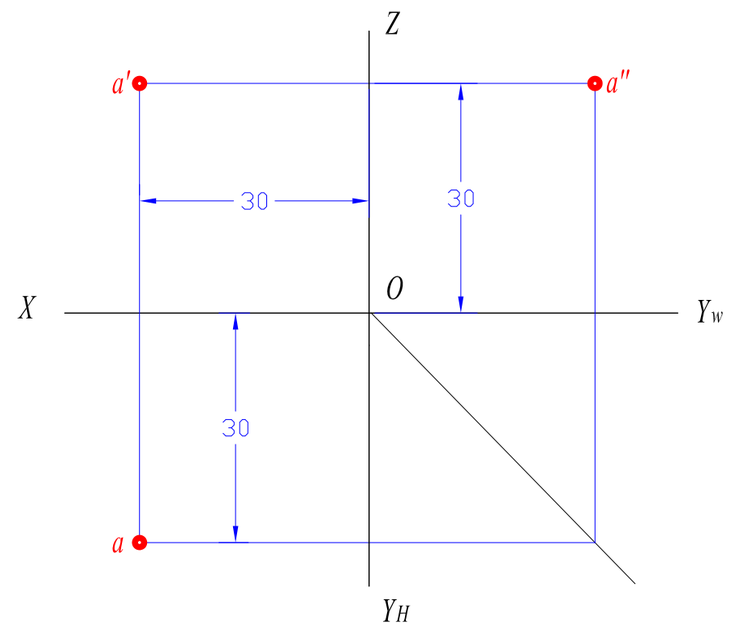
4. 已知*A*、*B*、*C*、*D*四点的两面投影，作它们的第三投影。



5. 已知点*A*（20，15，25），作其三面投影图。

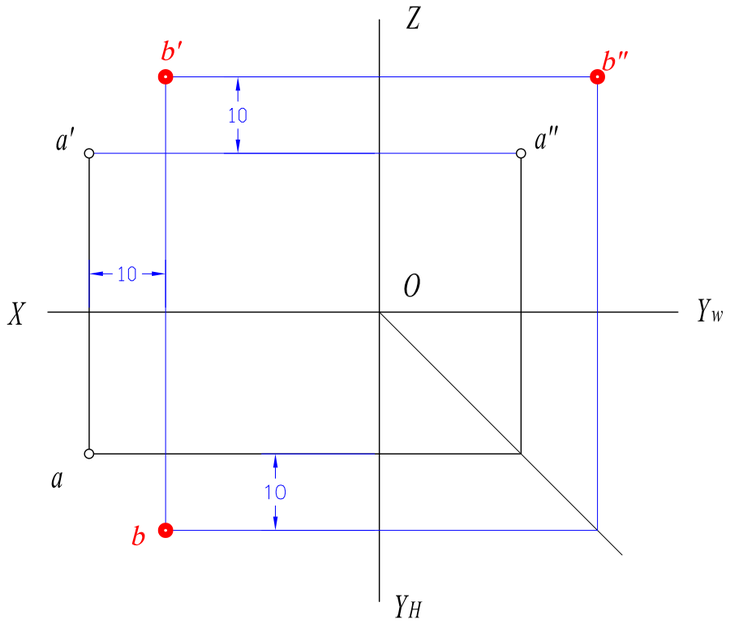


6. 作与投影面*V*、*H*、*W*距离均为30毫米的*A*点的投影图。

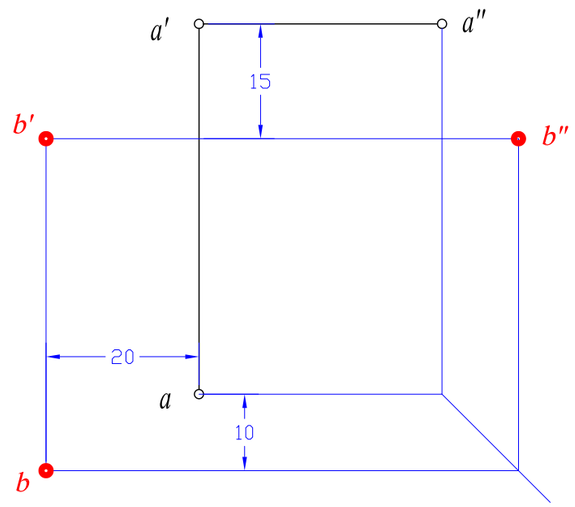


练习名称	点的投影（一）	班级		学号		姓名		4

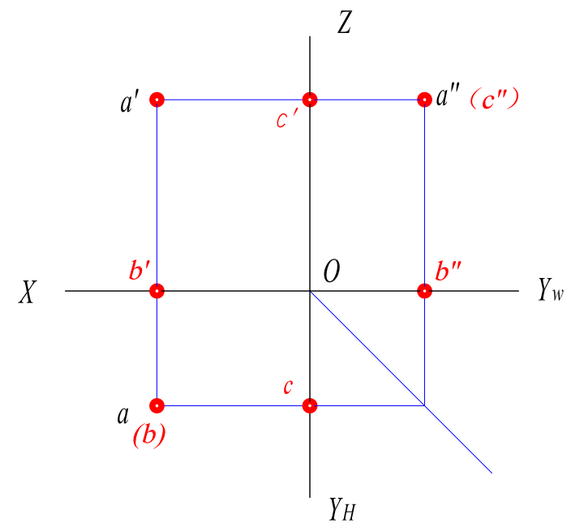
1. 已知A点的三面投影，B点在A点的右方、前方、上方，距离均为10mm，作B点的三面投影。



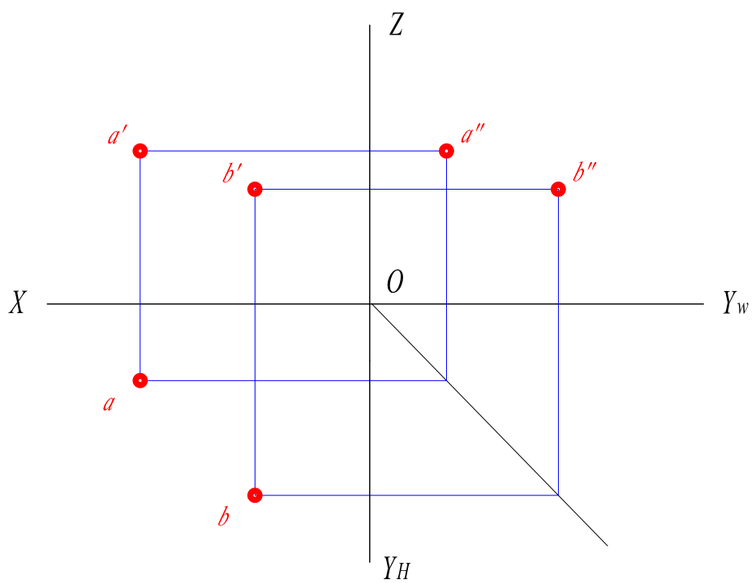
2. 已知A点的三面投影，B点在A点的左方20mm、前方10mm、下方15mm处，作B点的三面投影（无轴投影）。



3. 已知点A（20，15，25），B点在A点正下方的H面上，C点在A点正右方的W面上，作A、B、C三点的投影图；并判别重影点的可见性（不可见的投影加括号）。

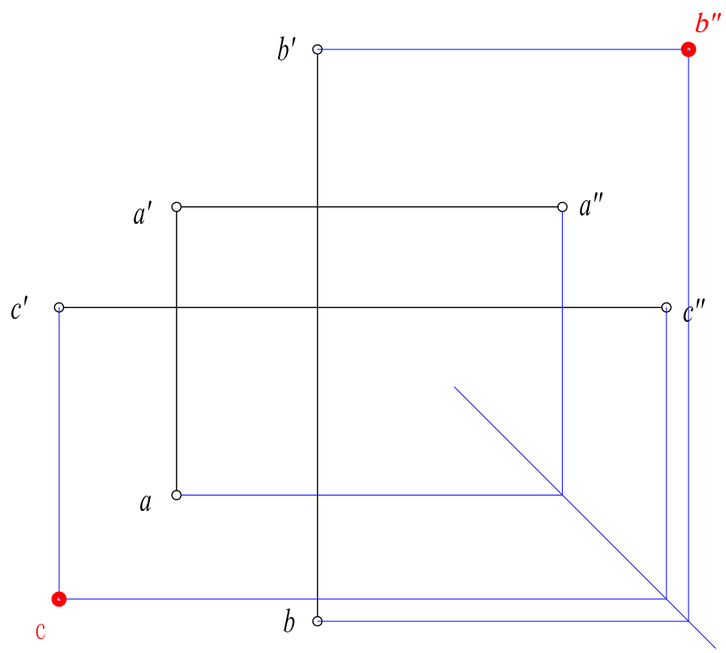


4. 已知A（30,10,20）、B（15，25，15），作它们的三面投影图；并判别其相对位置（图下填充）。

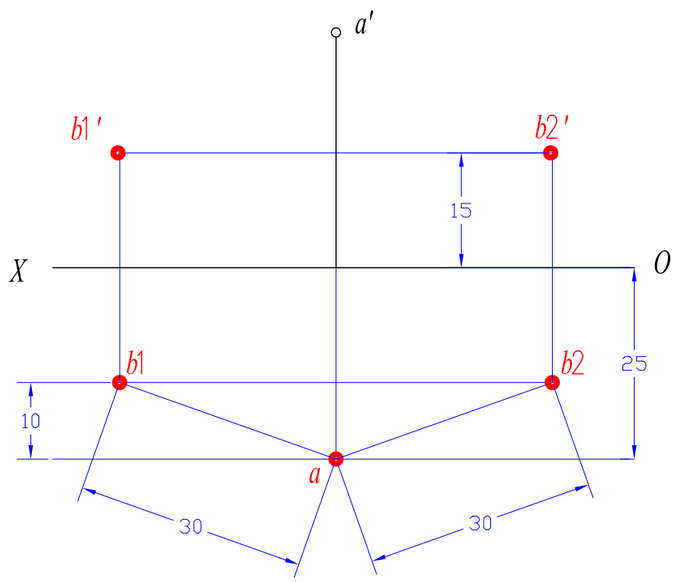


B点在A点的<u>右</u>方、<u>前</u>方、<u>下</u>方。

5. 已知A点的三个投影和B、C两点的两个投影，作B、C点的第三面投影图（无轴投影）。

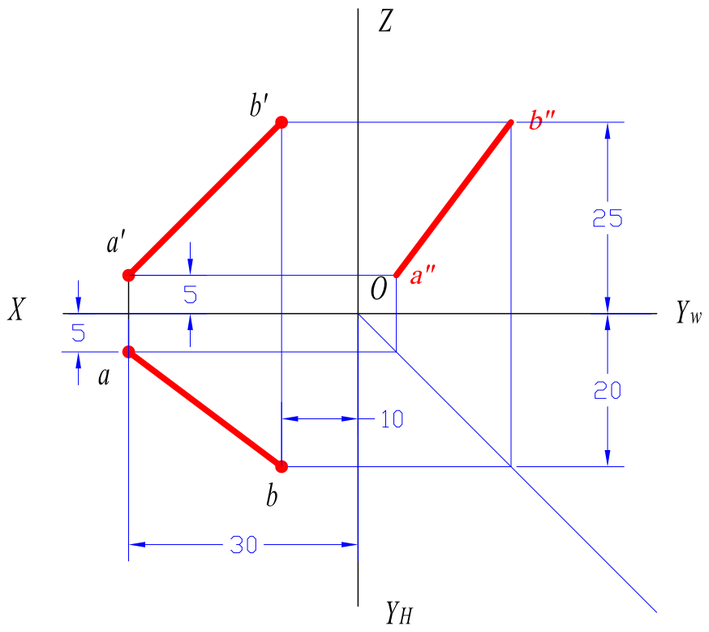


6、已知A点距V面25mm，B点距H面15mm，B点在A点的后方10mm处，且它们在H面上的投影相距30mm，完成A、B点的两面投影图。有几解？

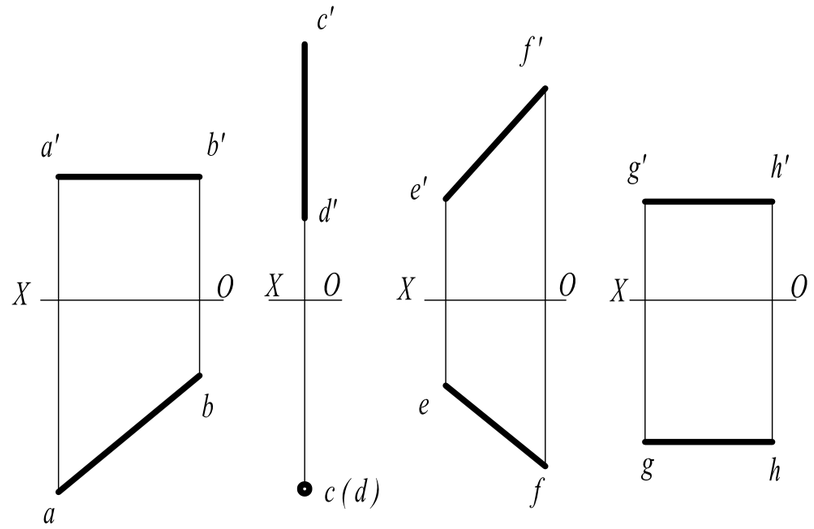


练习名称	点的投影（二）	班级		学号		姓名		5

1. 已知直线的两端点A（30,5,5）B（10,20,25），作该直线的三面投影图。

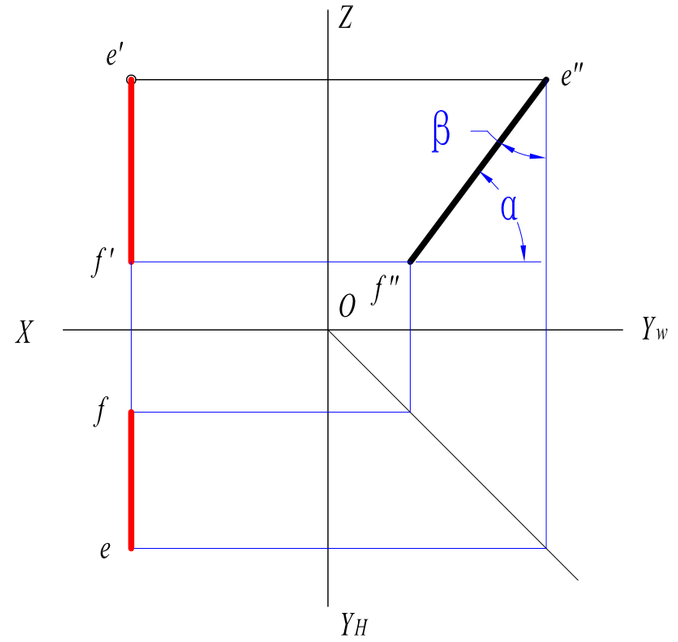


2. 判别下列直线的空间位置（图下填充）。

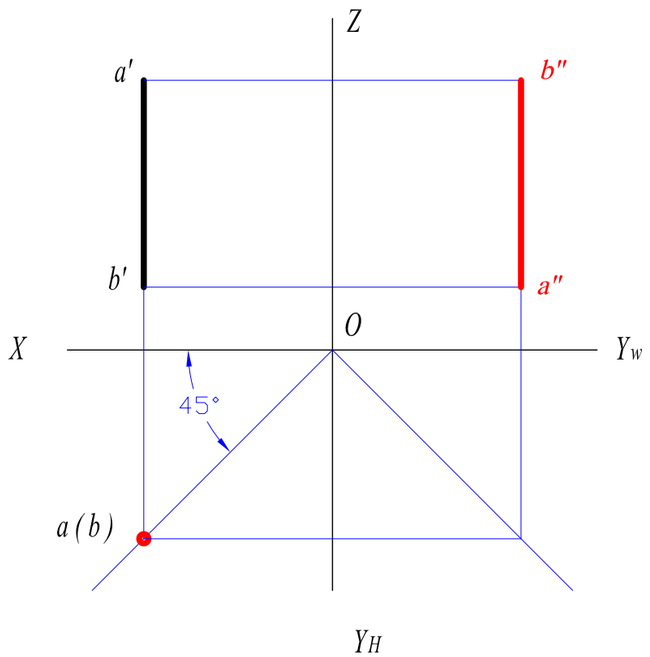


AB是水平线 CD是铅垂线 EF是一般位置直线 GH是侧垂线

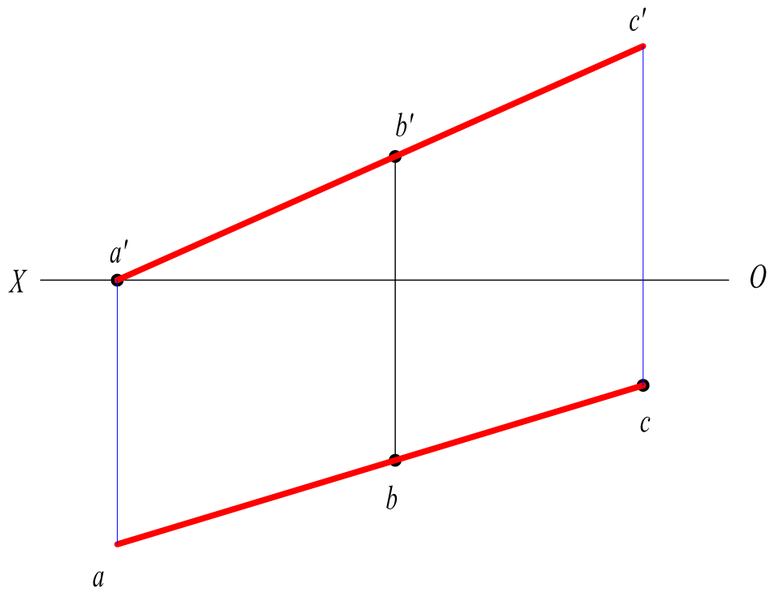
3. 已知直线EF为侧平线，求作该直线的V、H面投影，并在图上标出它与V面和H面的倾角α和β。



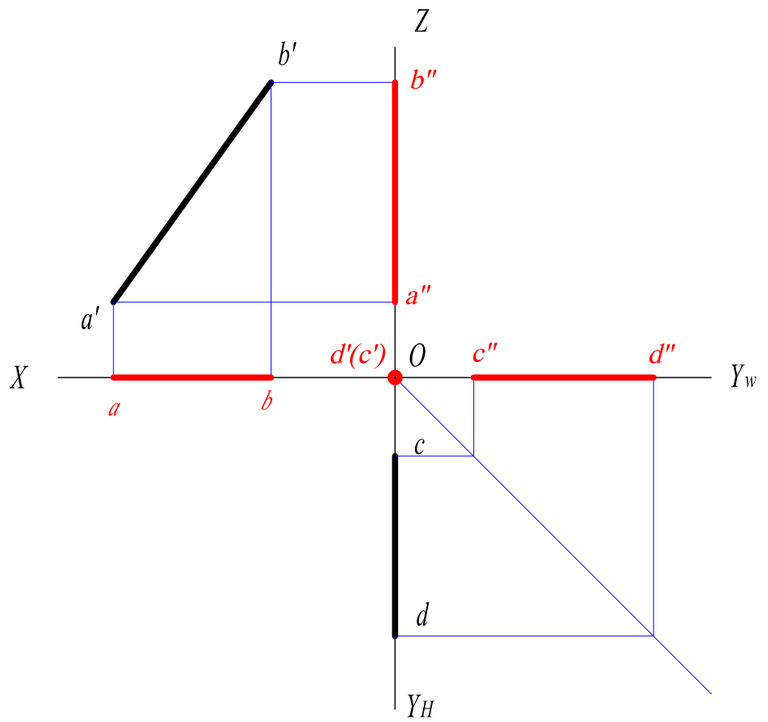
4. 已知直线AB为一铅垂线，它到V面及W面的距离相等，求作该直线的H及W面投影。



5. 已知A、B、C三点在同一直线上，完成它们的投影。

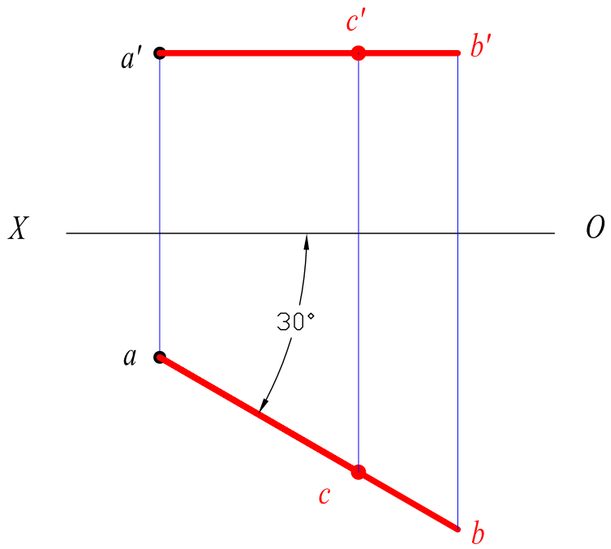


6. 已知直线AB在V面上，直线CD在OY轴上，完成它们的另两面投影。

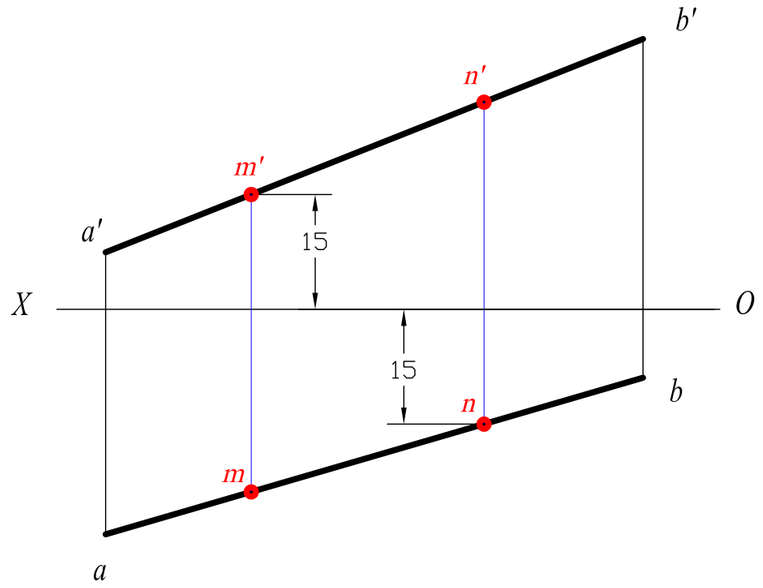


练习名称	直线的投影（一）	班级		学号		姓名		6

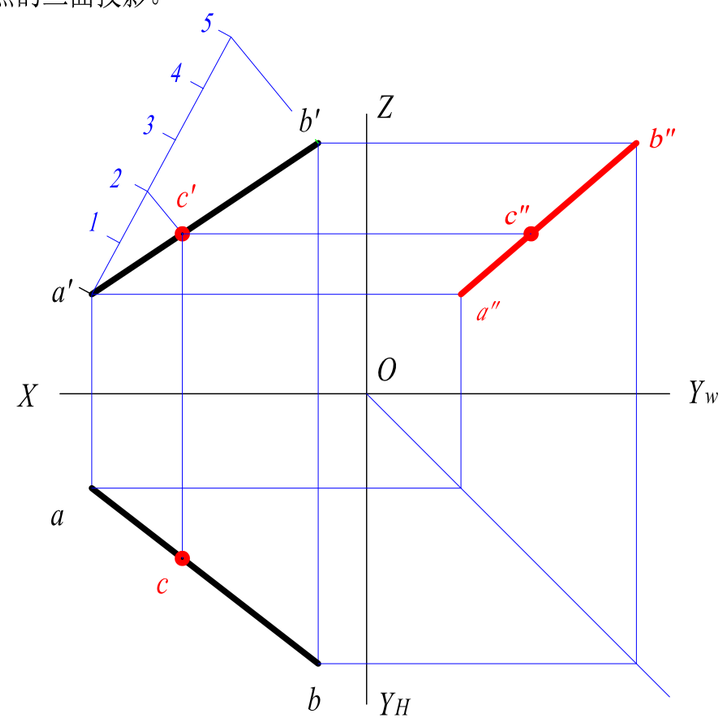
1. 已知水平线*AB*的实长为45mm，它对*V*面的倾角为30°，完成该直线的两面投影；并在*AB*上取一点*C*，*AC*为30mm，作*C*点的两面投影。



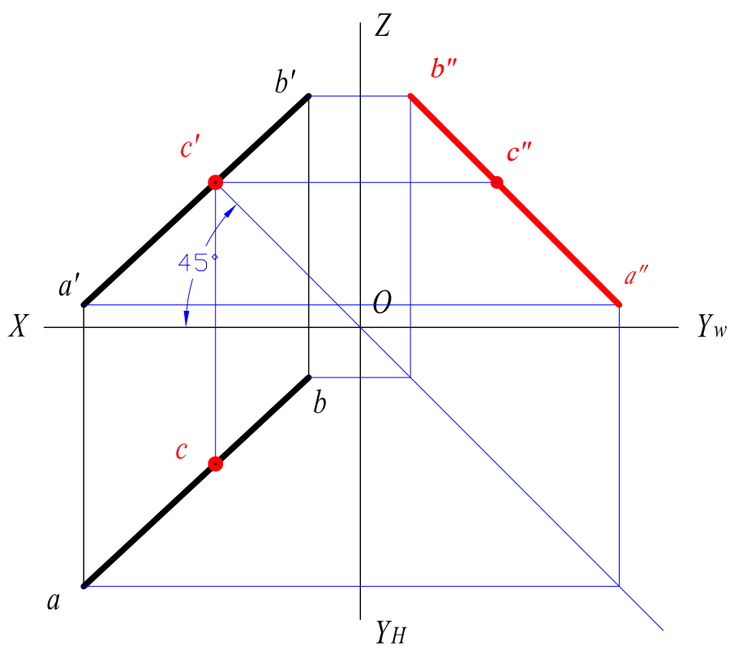
2. 已知直线*AB*的两面投影，在*AB*上取两点*M*、*N*，使*M*点距*H*面15mm；*N*点距*V*面15mm。完成它们的两面投影。



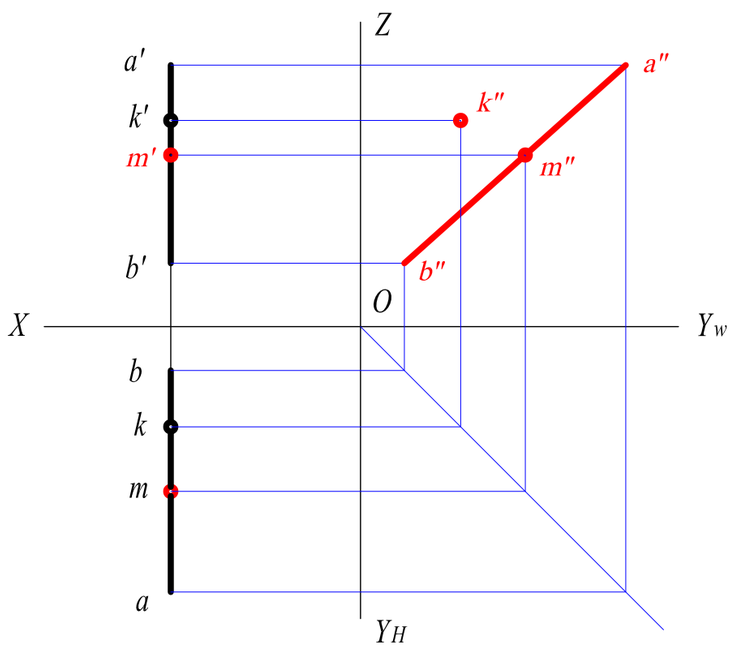
3. 已知*C*点在直线*AB*上，且*AC*:*CB*=2:3，完成直线*AB*的侧面投影和*C*点的三面投影。



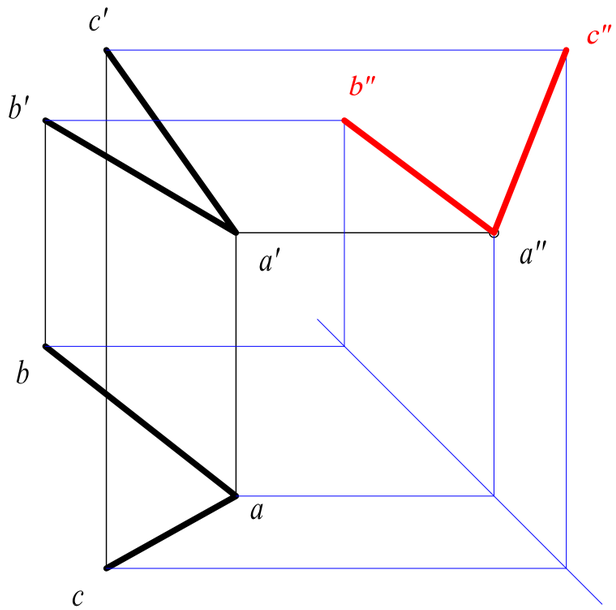
4. 已知直线*AB*的两面投影，在*AB*上取一点*C*，使它距*H*、*W*面等远，完成直线*AB*的侧面投影及*C*点的三面投影。



5. 完成直线*AB*的第三投影后，再求位于直线*AB*上的*M*点的另两面投影；最后作图判别点*K*是否在直线*AB*上？（求出*k''*即可）

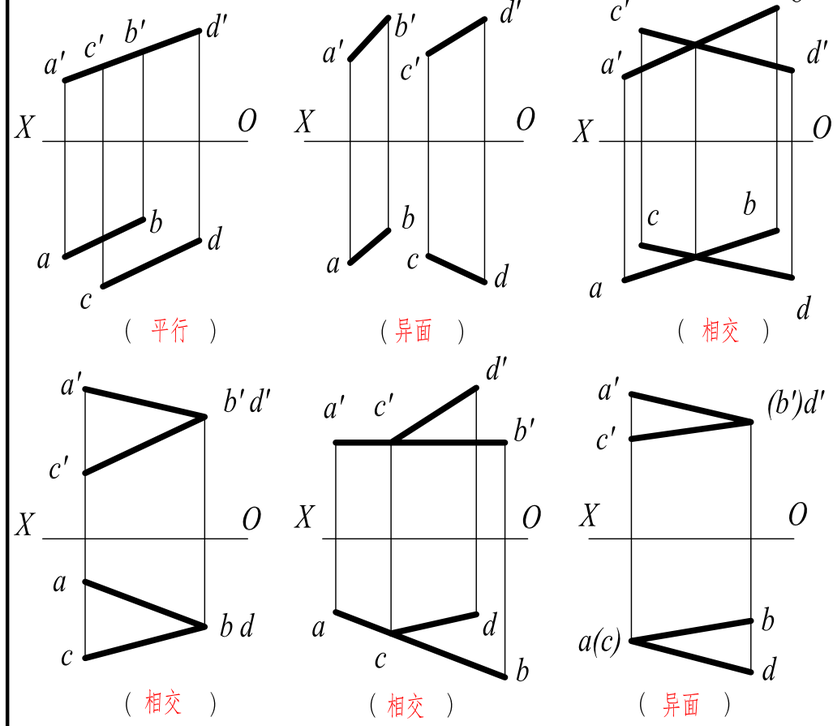


6. 画出*AB*、*AC*两直线的侧面投影（不得画出投影轴）。

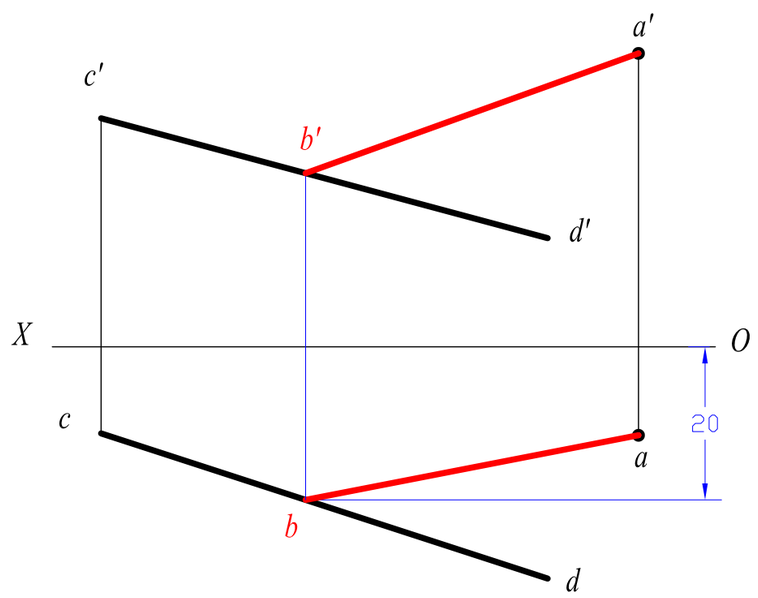


练习名称	直线的投影（二）	班级		学号		姓名		7

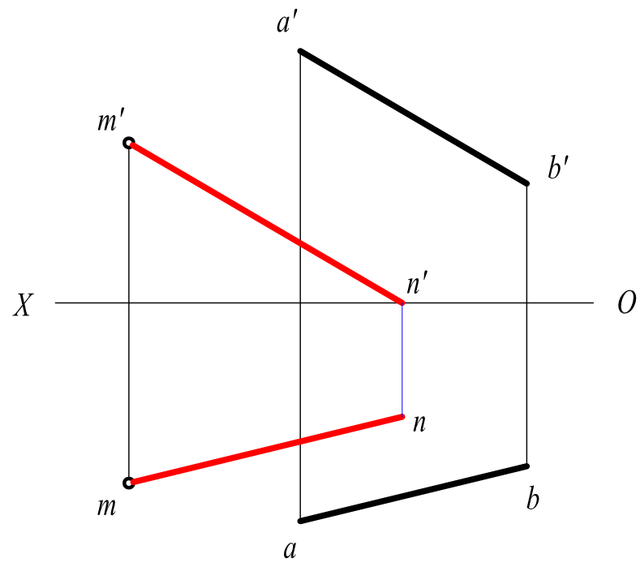
1. 判别*AB*、*CD*两直线的相对位置（平行、相交、交叉）。



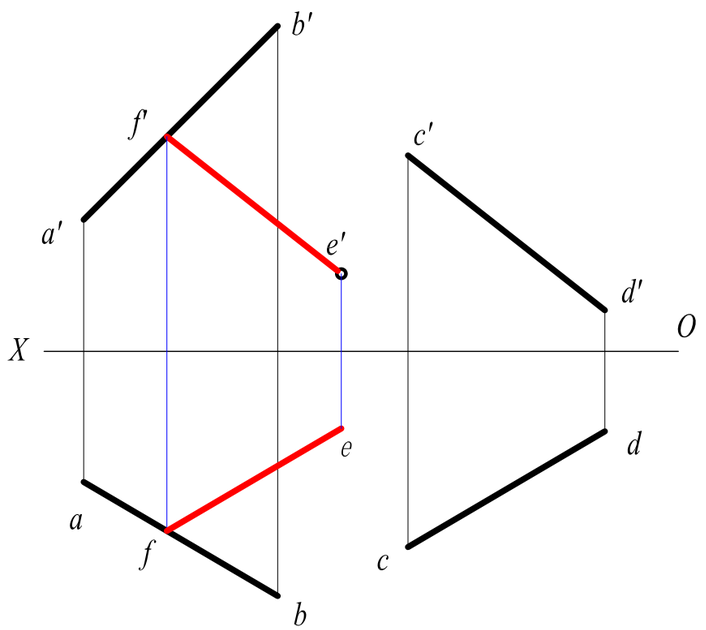
2. 过*A*点作直线*AB*，使*AB*与*CD*相交，交点距*V*面20毫米。



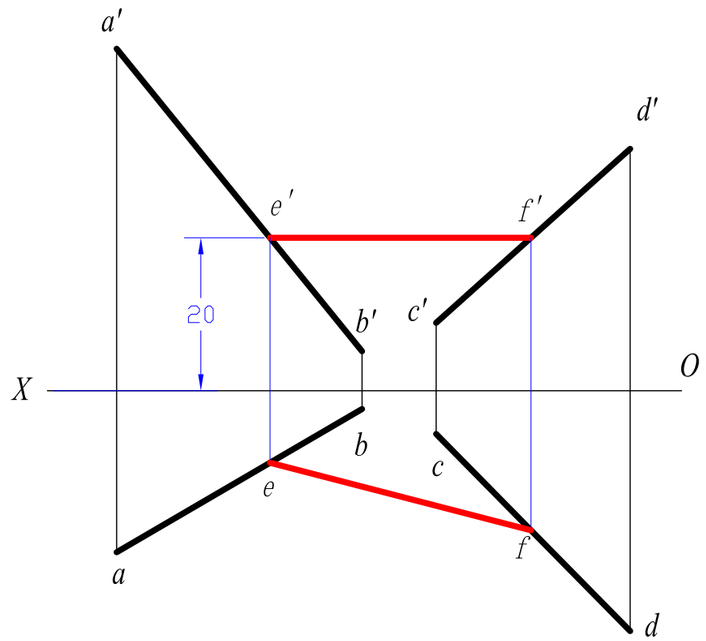
3. 过*M*点作直线*MN*平行于直线*AB*，其*N*点在*H*面上。



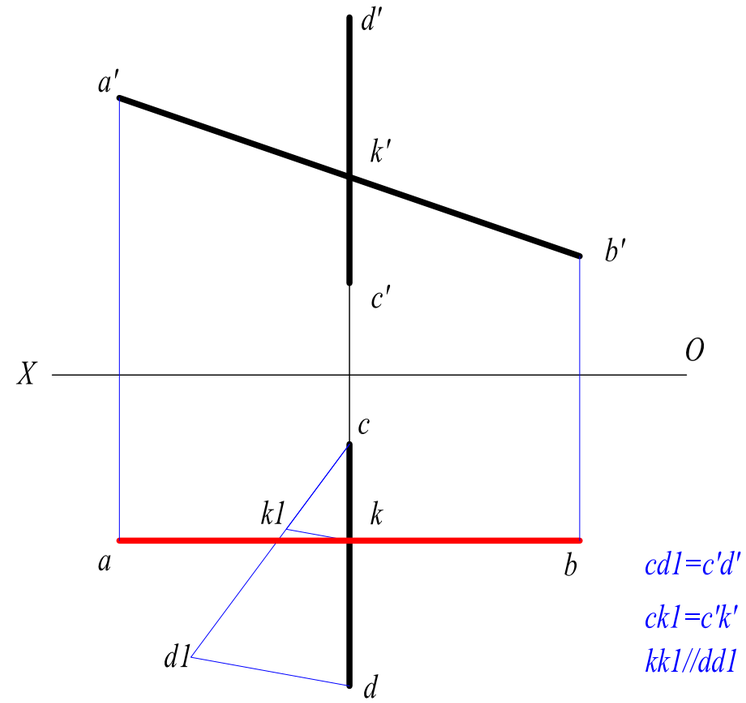
4. 过*E*点作直线*EF*与*CD*平行，且与直线*AB*相交。



5. 作距*H*面20㎜的水平线*EF*，使其与*AB*、*CD*两直线同时相交。

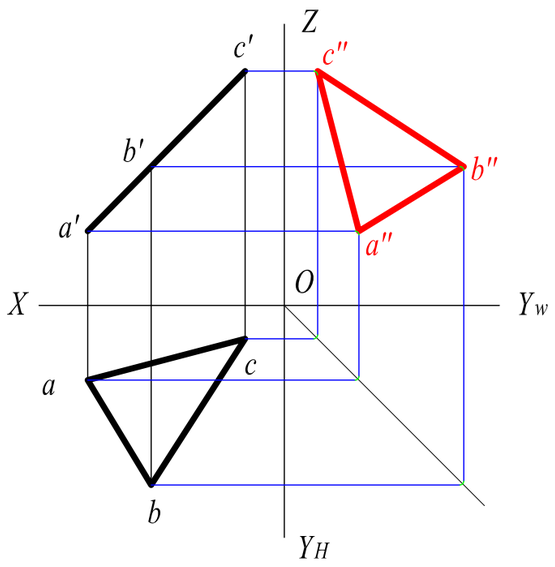


6. 已知*AB*、*CD*两直线相交，*AB*为正平线，求*ab*（不用侧面）。

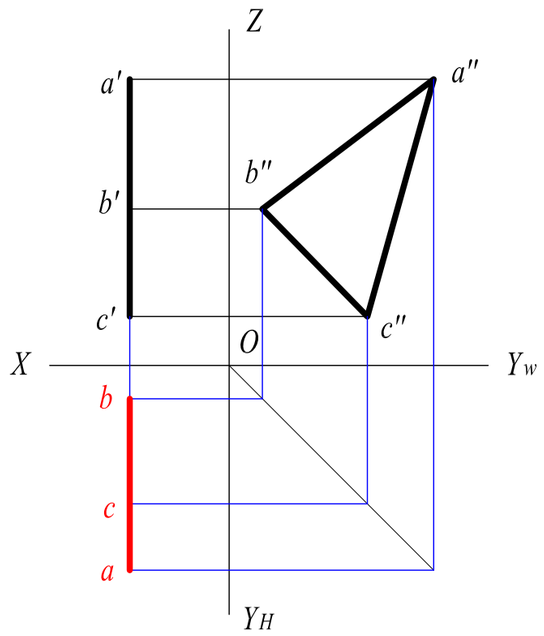


练习名称	直线的投影（三）	班级		学号		姓名		8

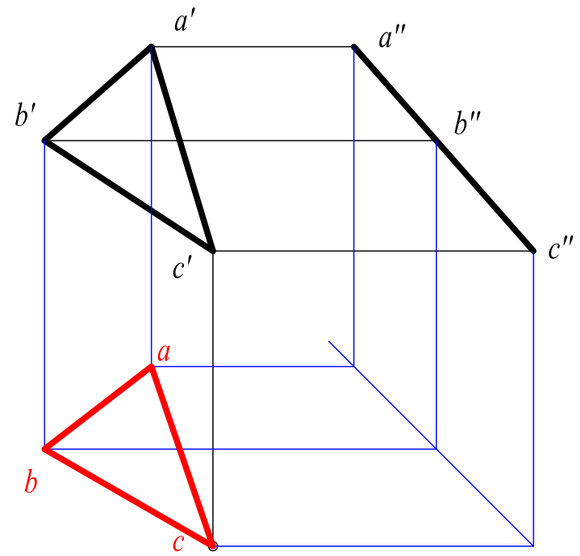
1. 完成下列四个平面的投影，并判别它们的空间位置（图下填充）。



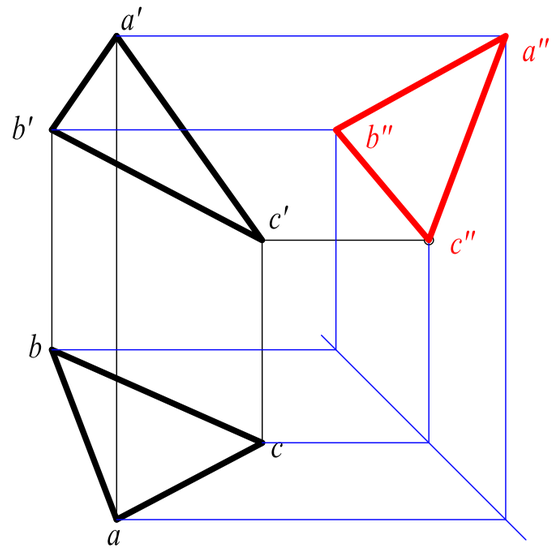
△ABC是 正垂 面。



△ABC是 侧平 面。

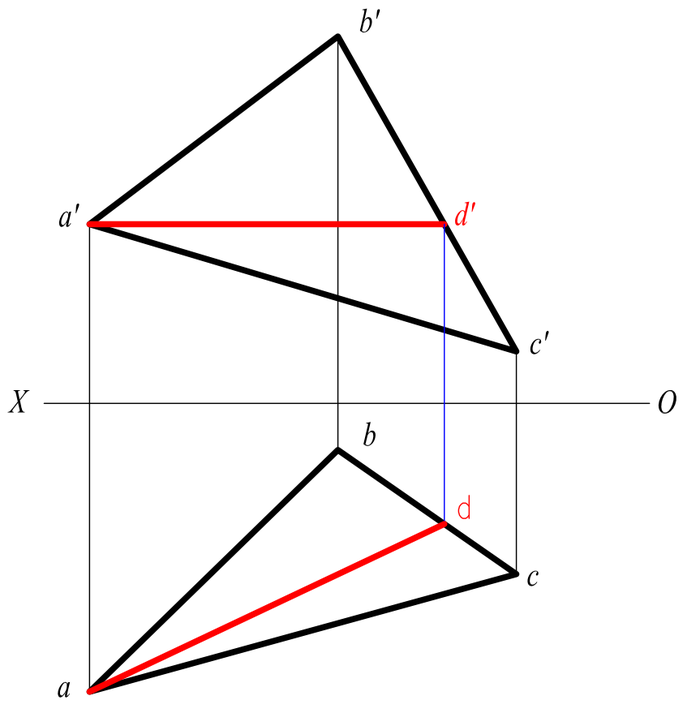


△ABC是 侧垂 面。

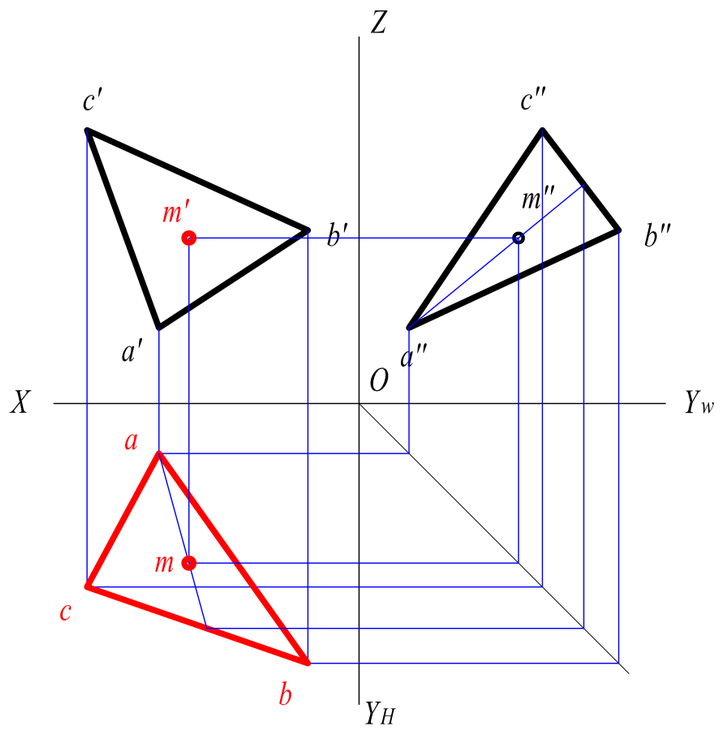


△ABC是 一般位置平 面。

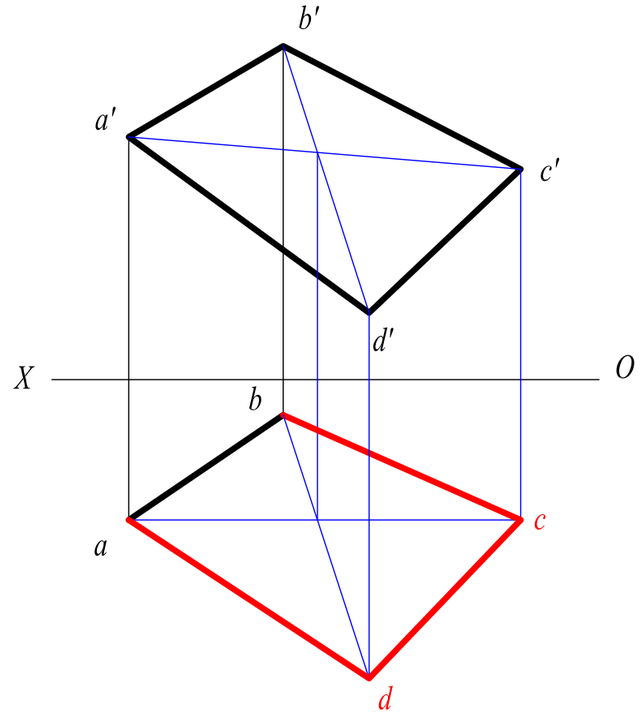
2. 在△ABC平面上过A点作一该面上的水平线。



3. 已知M点在△ABC平面上，完成该面和M点的其余投影。



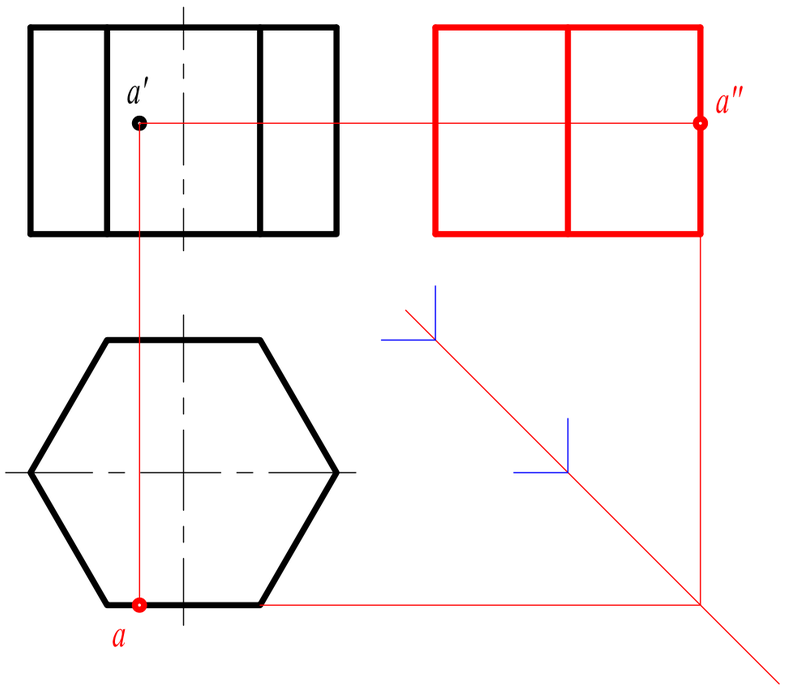
4. 已知平面ABCD的对角线AC为正平线，完成该平面的水平投影。



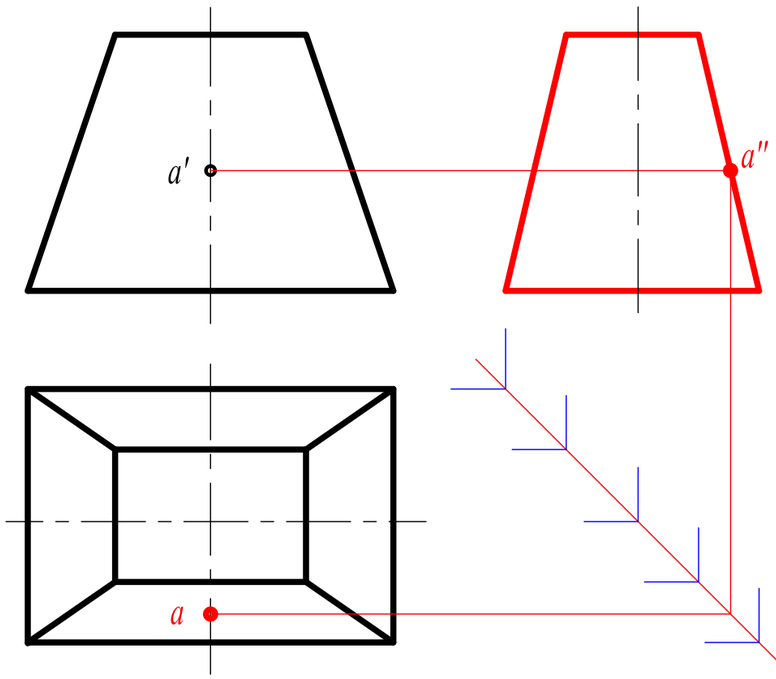
练习名称	平面的投影	班级		学号		姓名		9

求作下列平面立体的第三视图及其表面点A的另两个投影

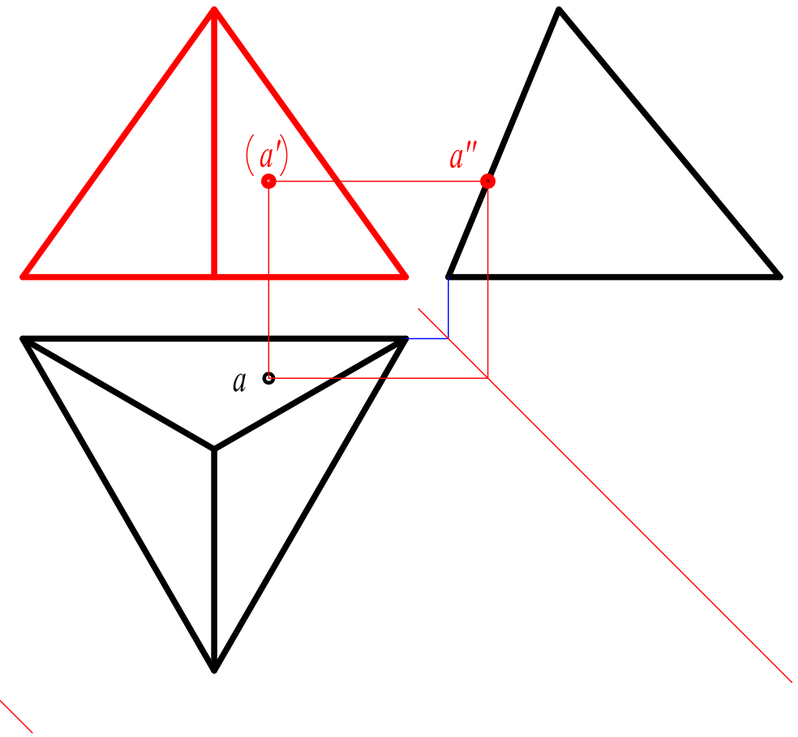
1.



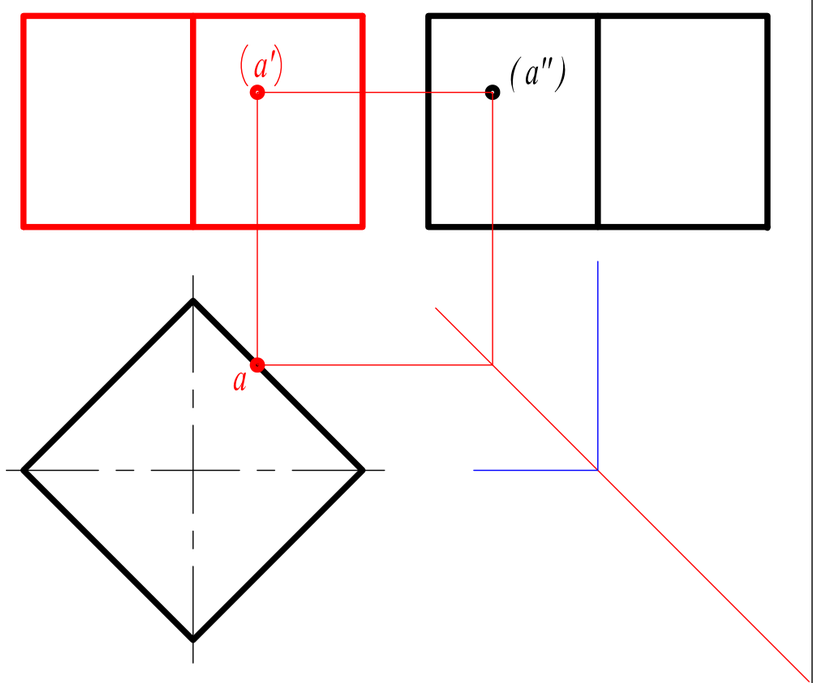
2.



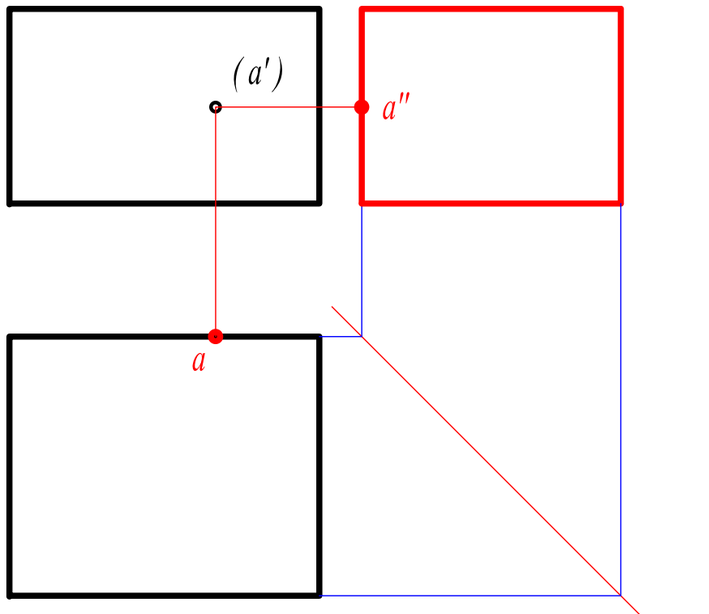
3.



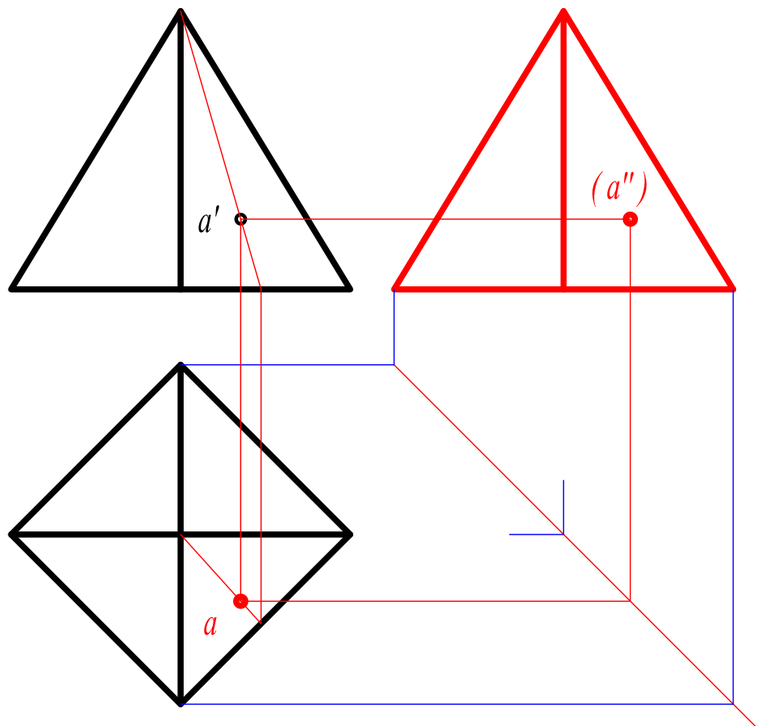
4.



5.



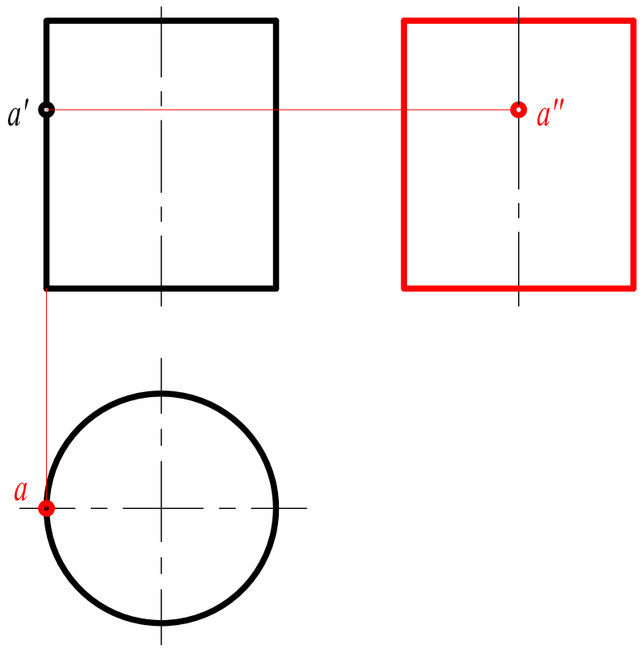
6.



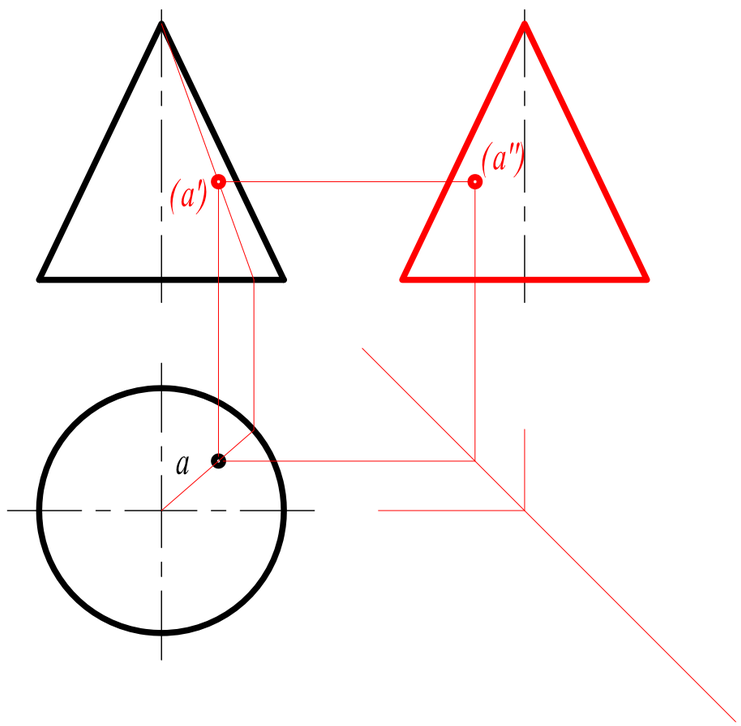
练习名称	立体的投影及其表面取点（一）	班级		学号		姓名		10

求作下列曲面立体的第三视图及其表面点A的另两个投影

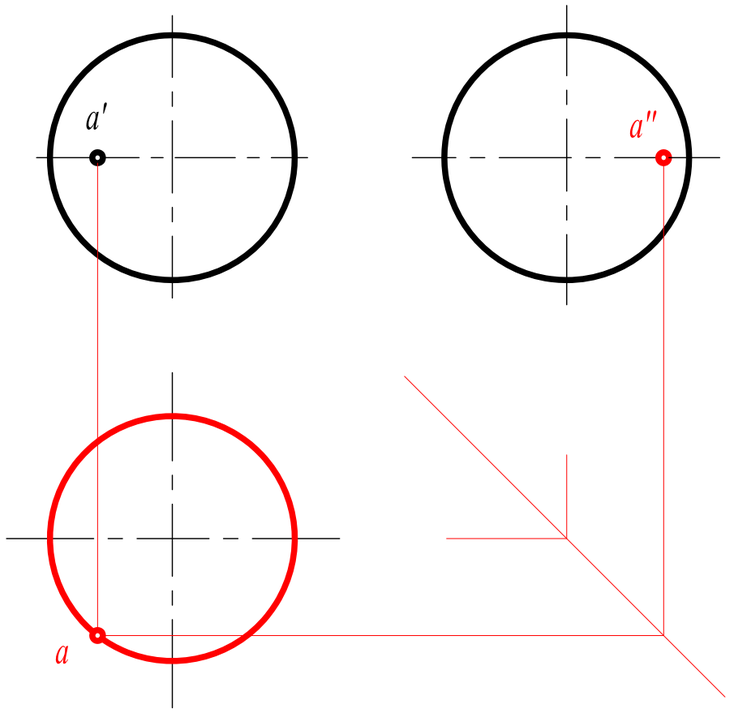
1.



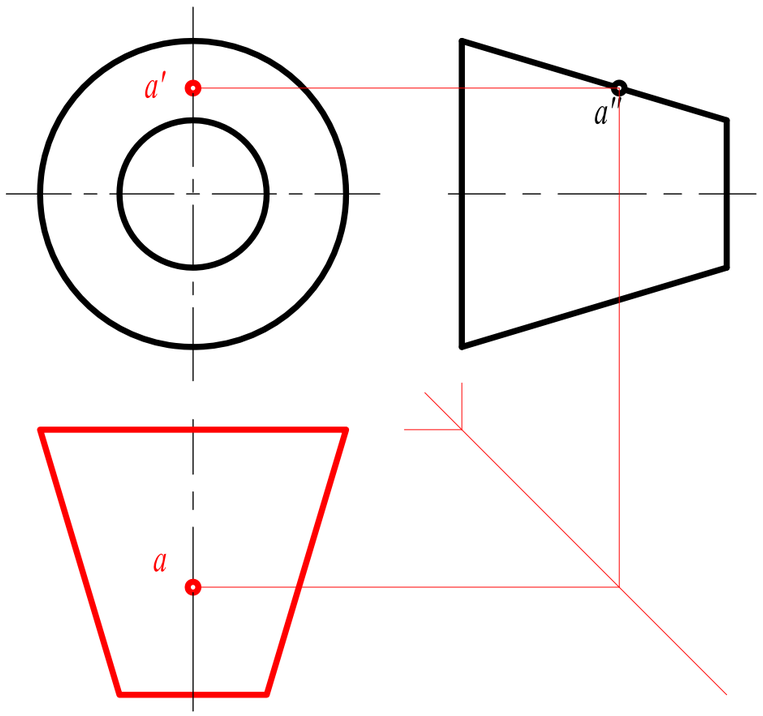
2.



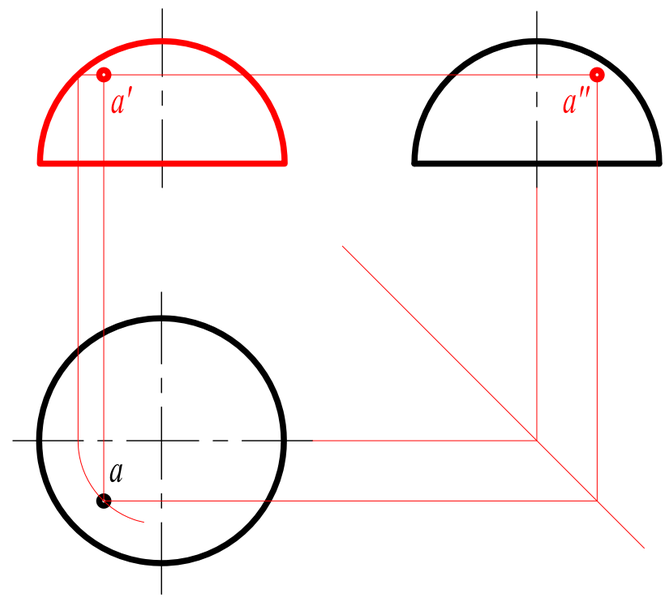
3.



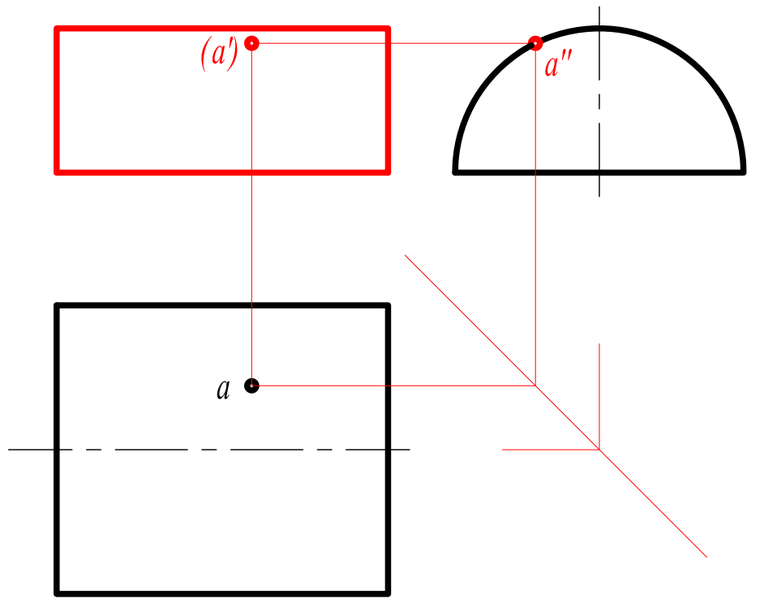
4.



5.



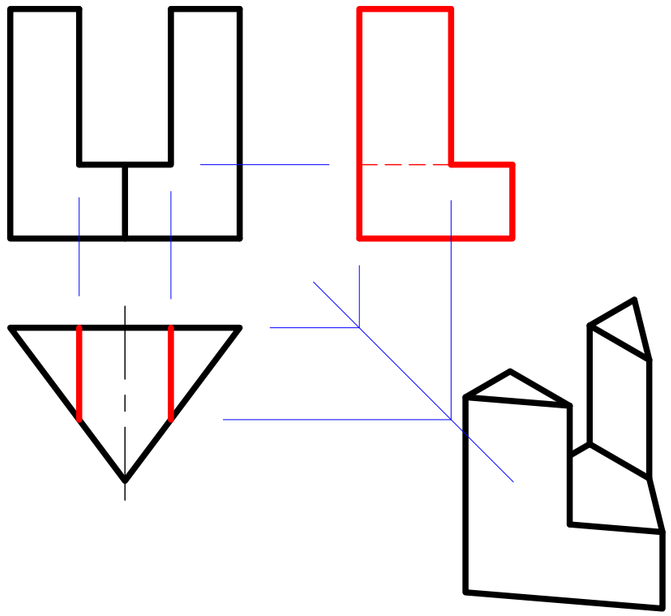
6.



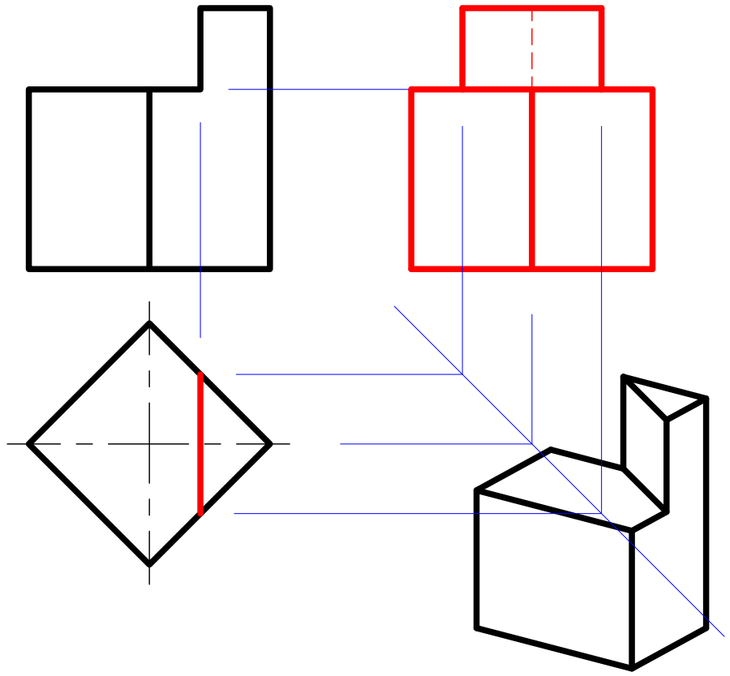
练习名称	立体的投影及其表面取点（二）	班级		学号		姓名		11

分析平面立体表面的交线，补画图中的漏线及第三视图（不可见的投影画虚线）

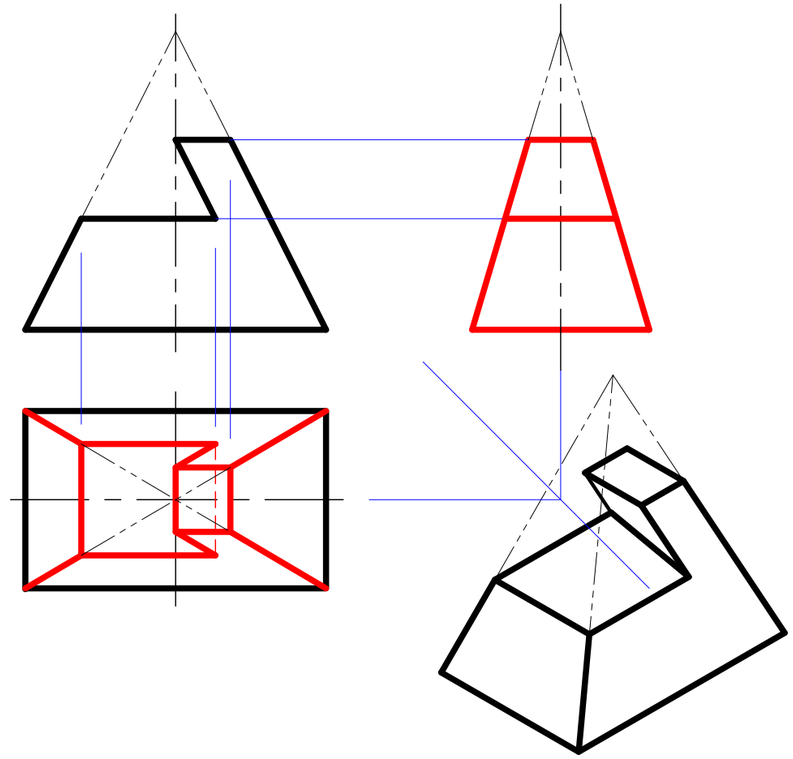
1.



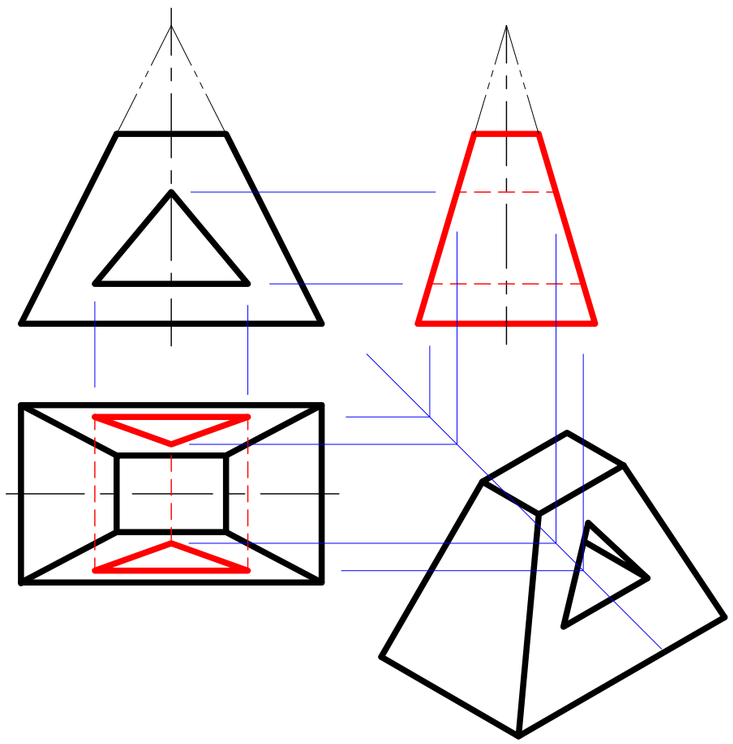
2.



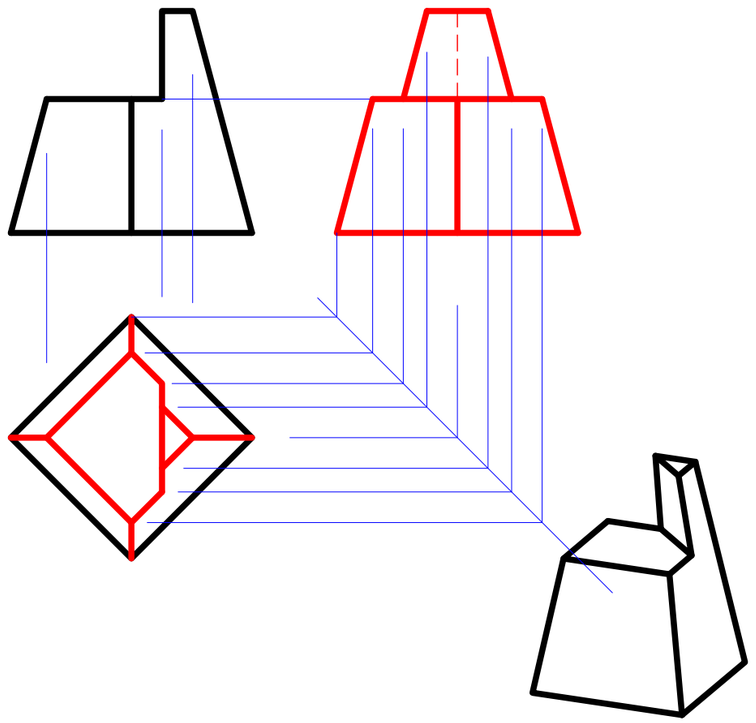
3.



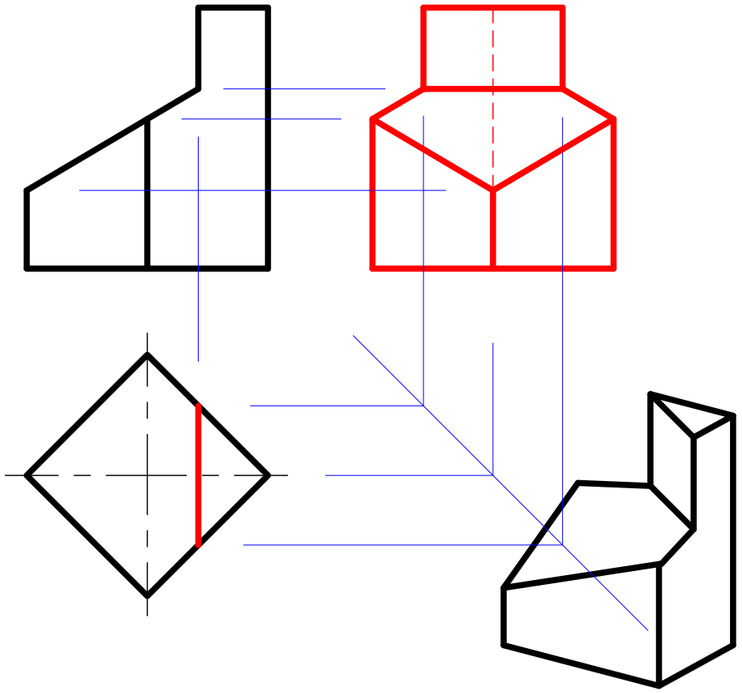
4.



5.



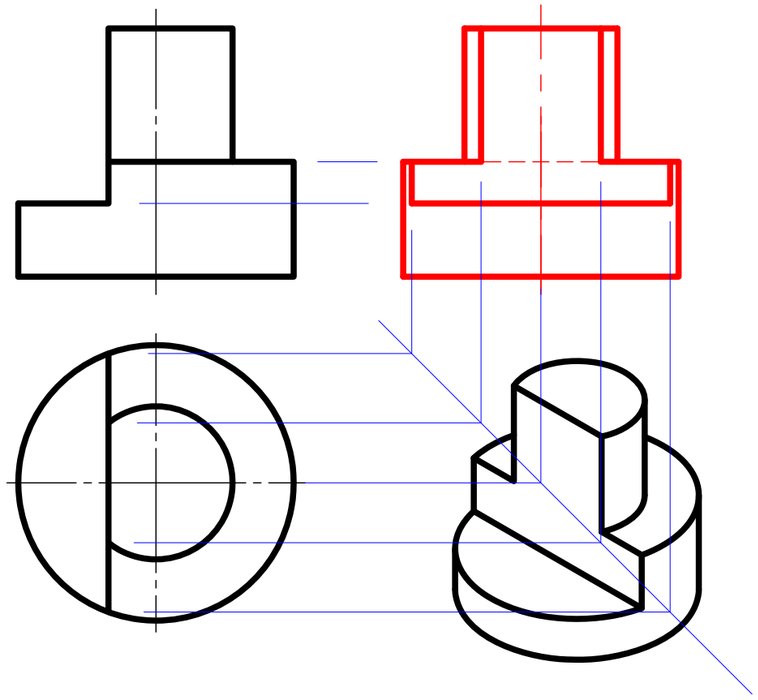
6.



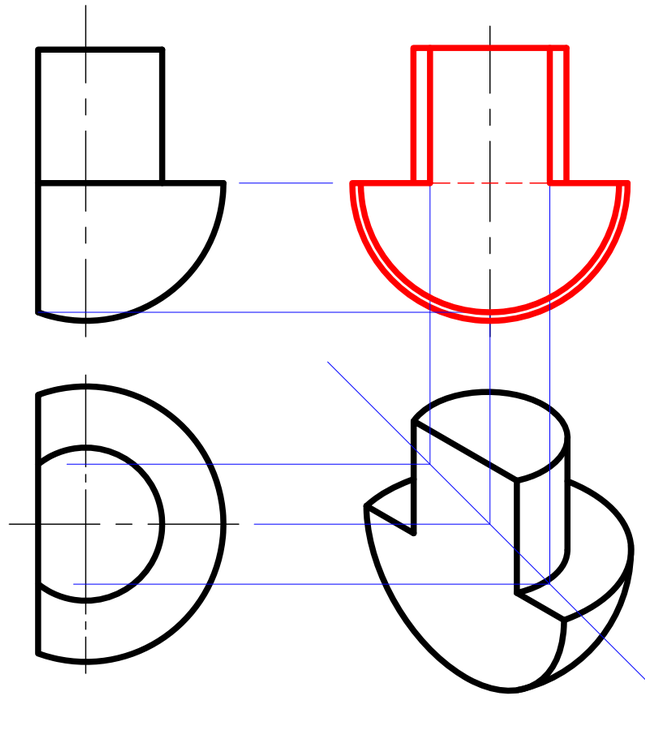
练习名称	平面与立体相交（一）	班级		学号		姓名		12

分析曲面立体表面的交线，补画图中的漏线及第三视图（不可见的投影画虚线）

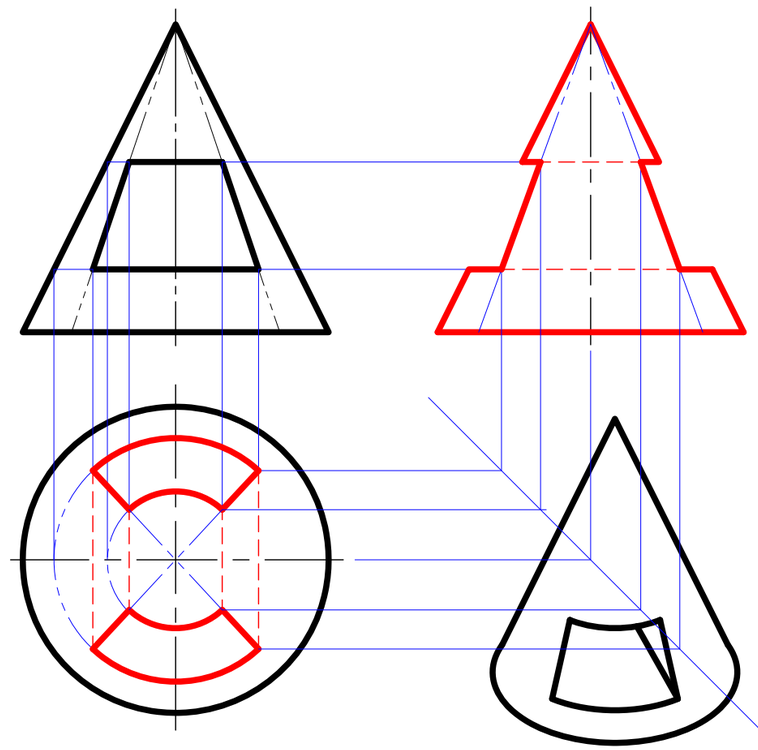
1.



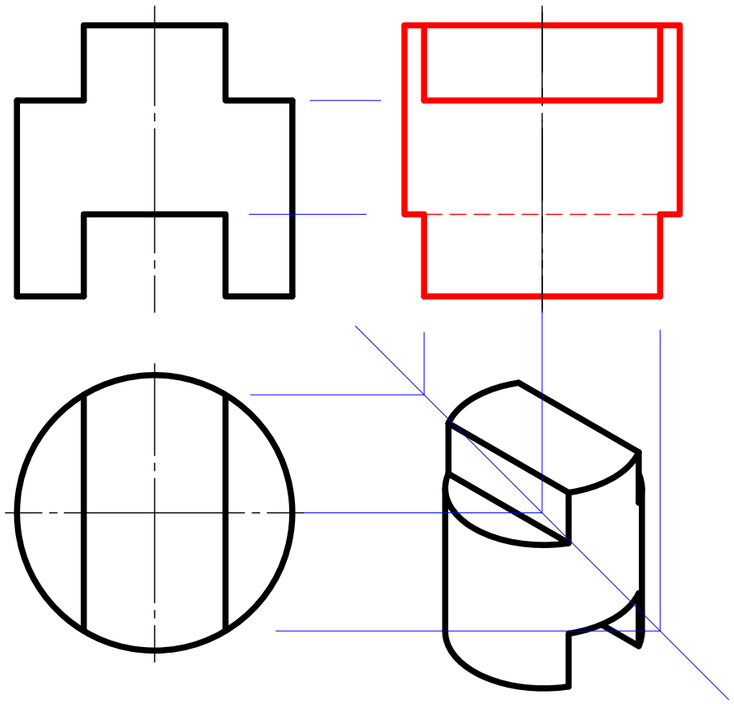
2.



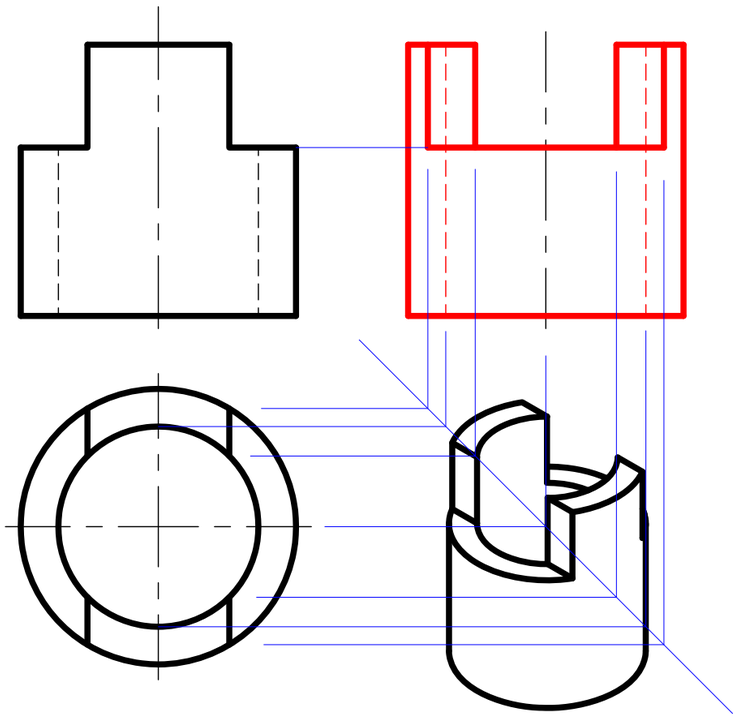
3.



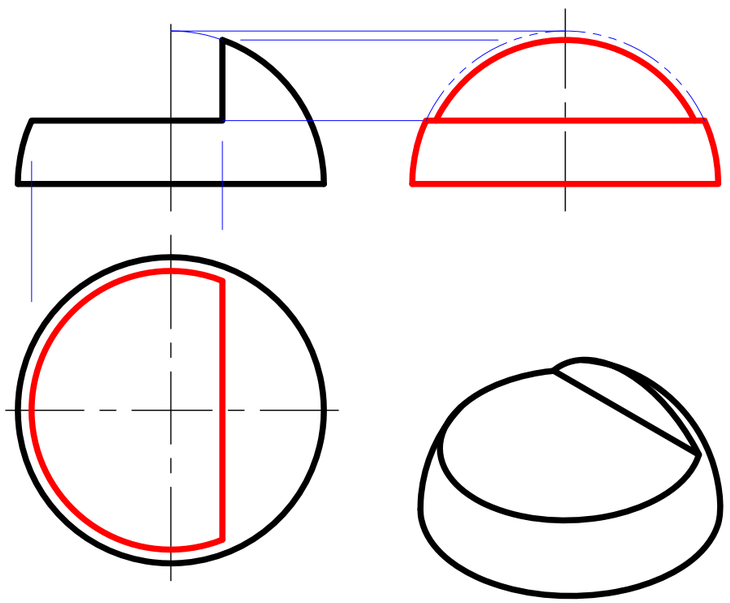
4.



5.

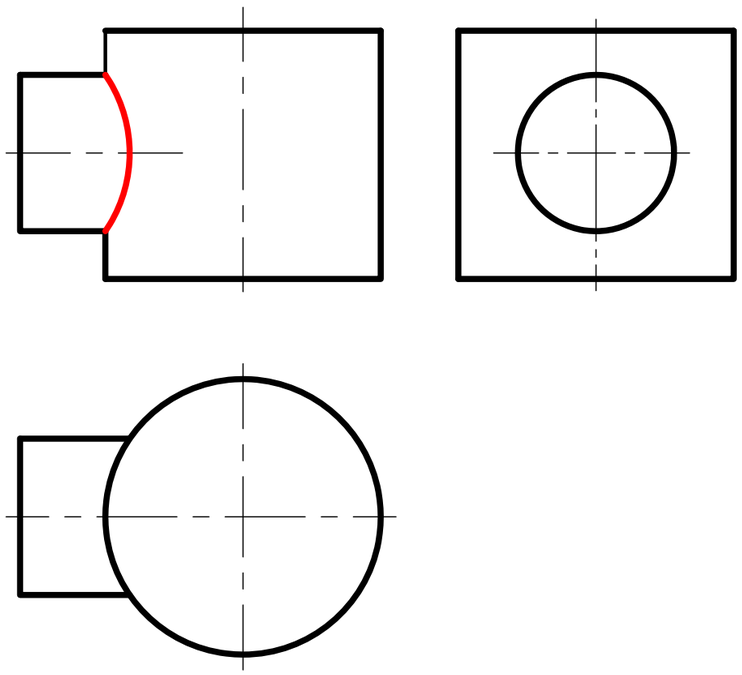


6.

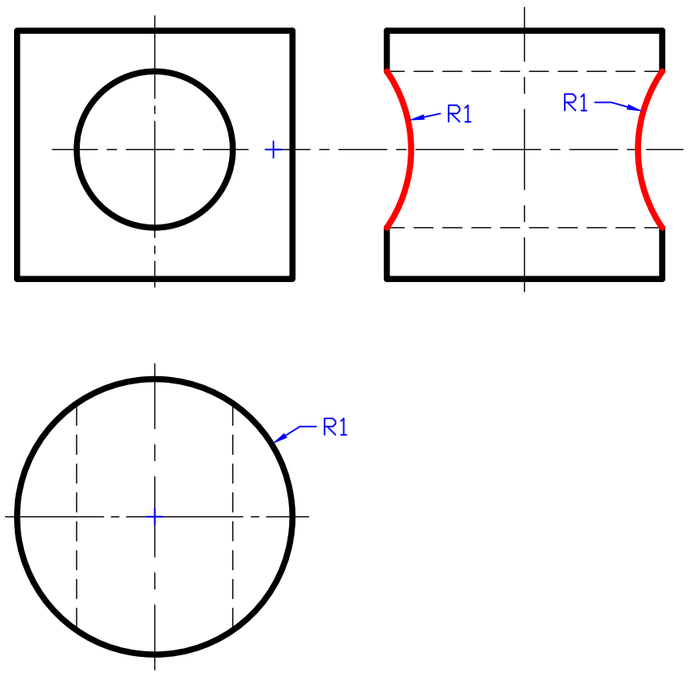


练习名称	平面与立体相交（二）	班级		学号		姓名		13

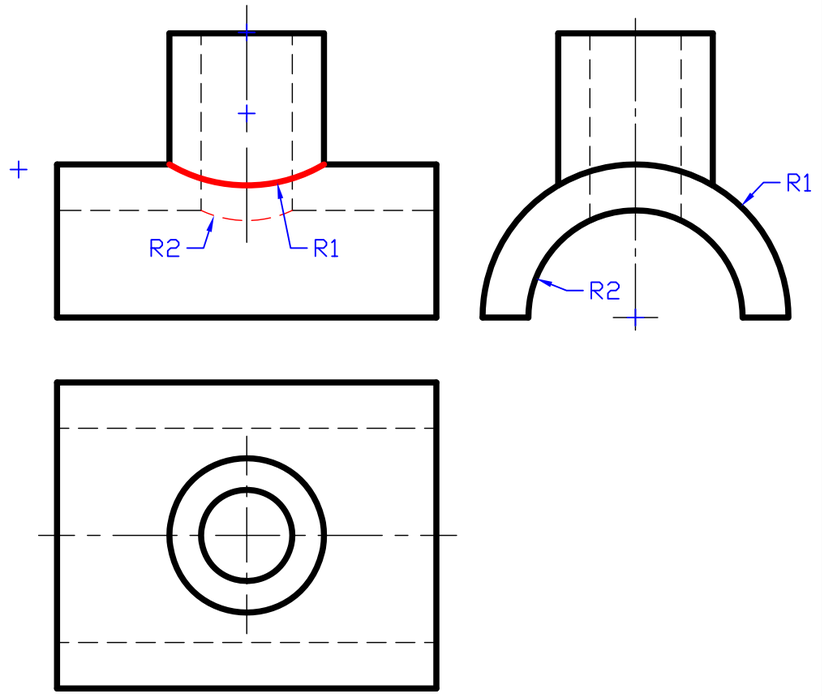
完成曲面立体表面相贯线的投影（第一题采用求相贯点的方法作图，其余采用相贯线的简化画法）



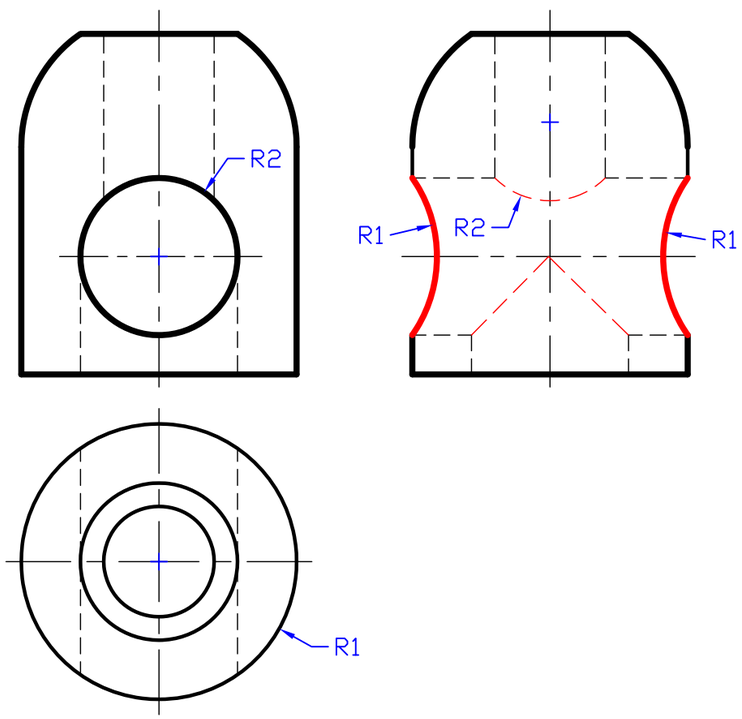
2.



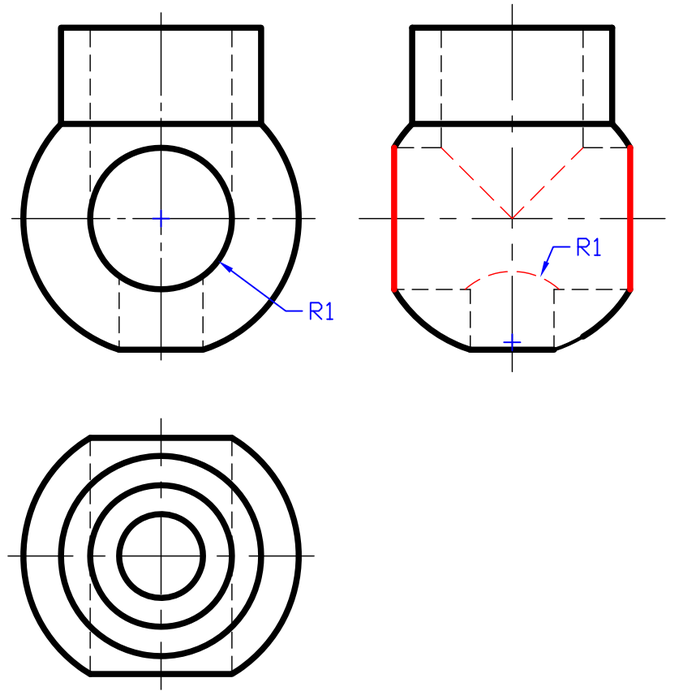
3.



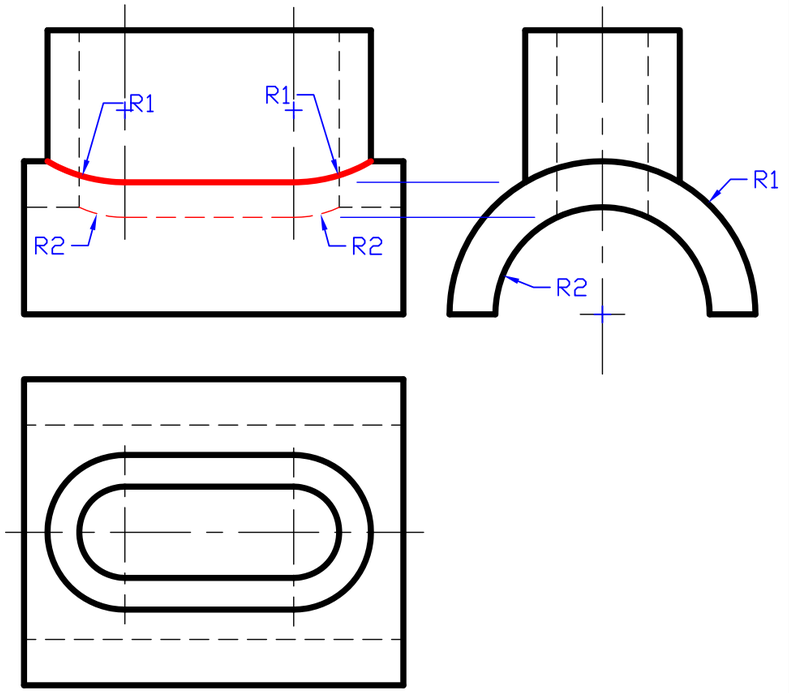
4.



5.



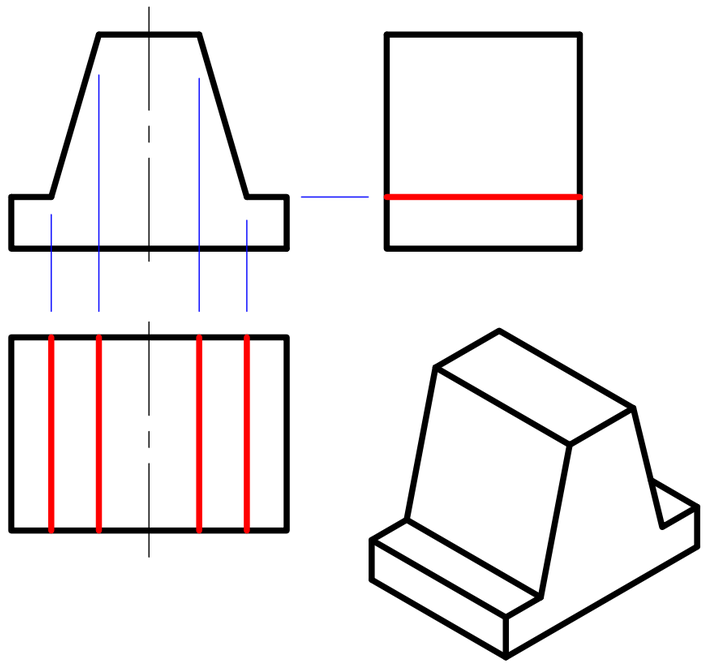
6.



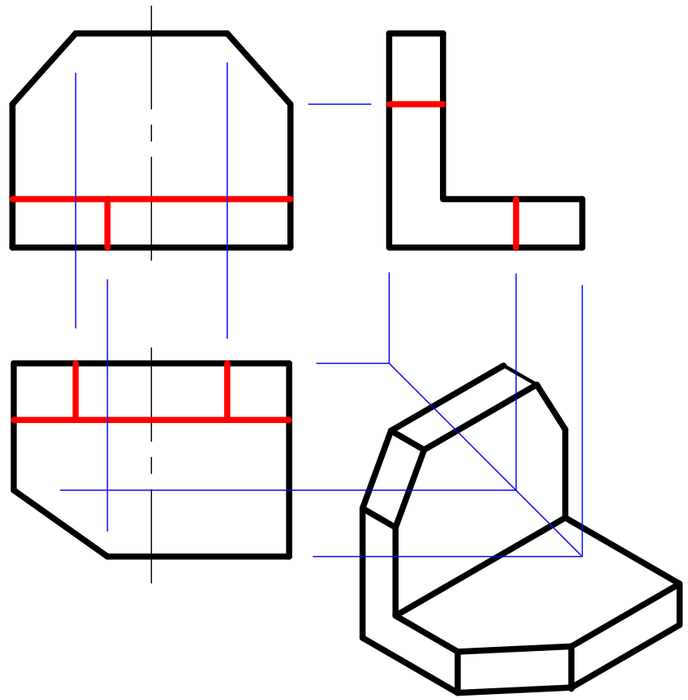
练习名称	两曲面立体相交	班级		学号		姓名		14

对照立体图检查三视图，补画图中所缺的投影线。

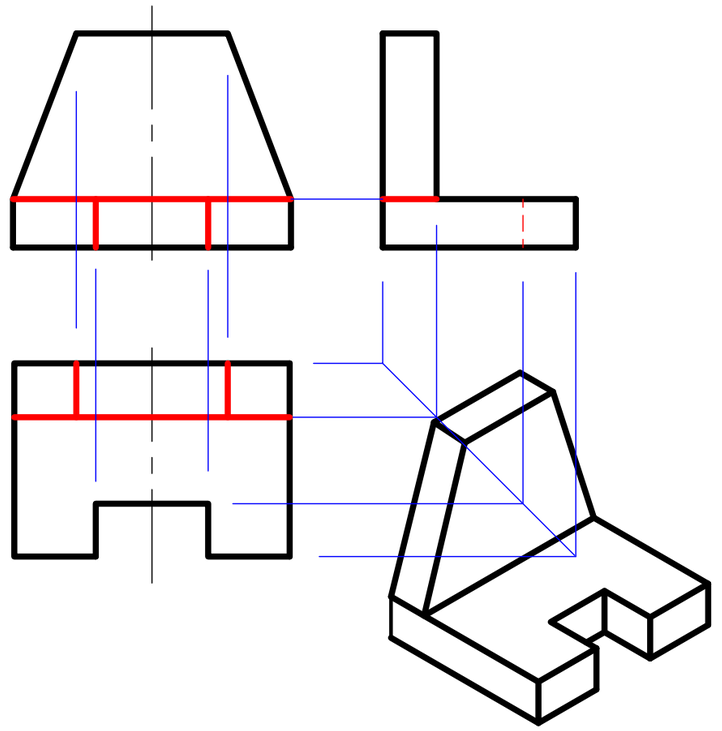
1.



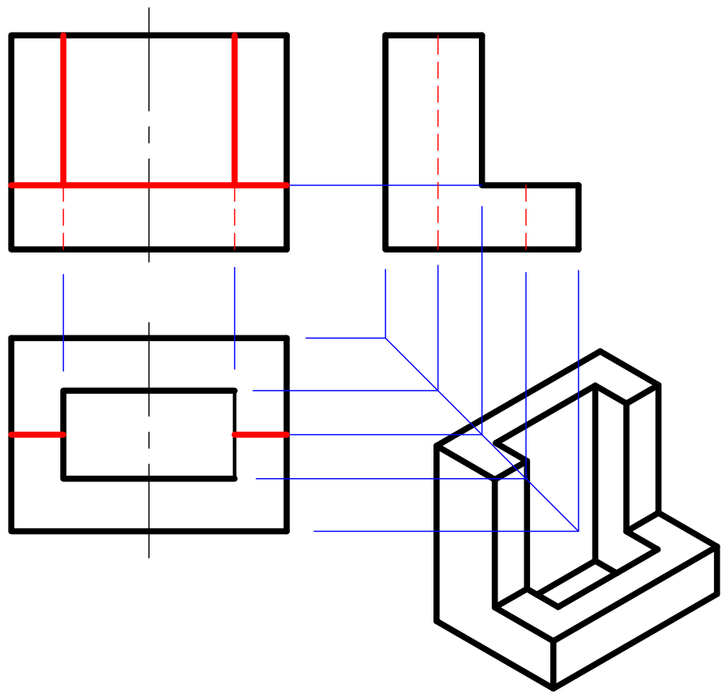
2.



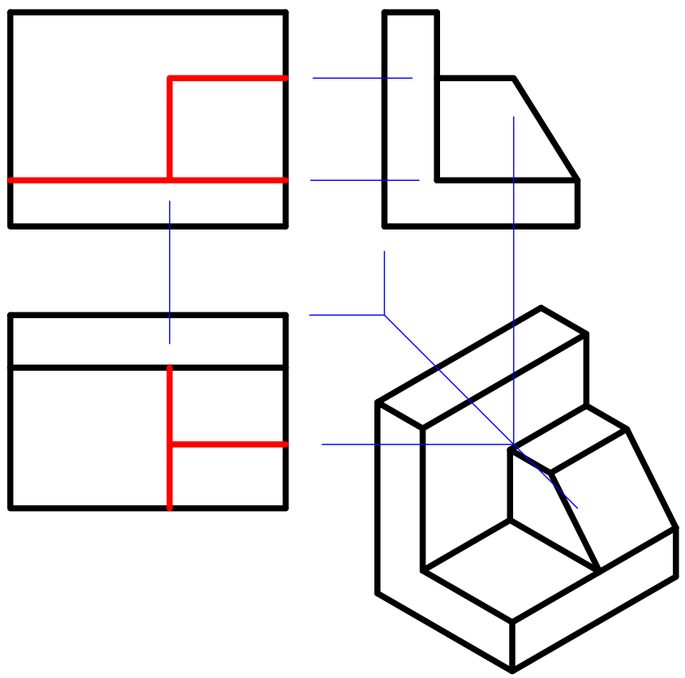
3.



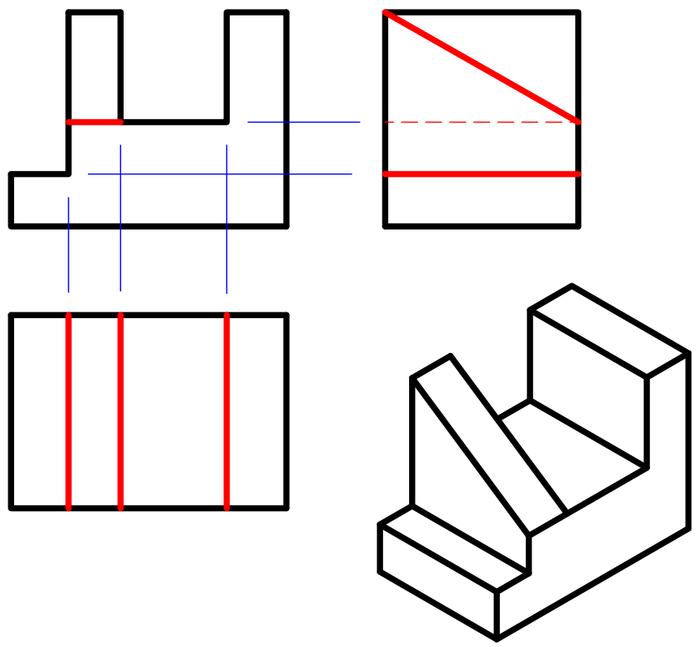
4.



5.



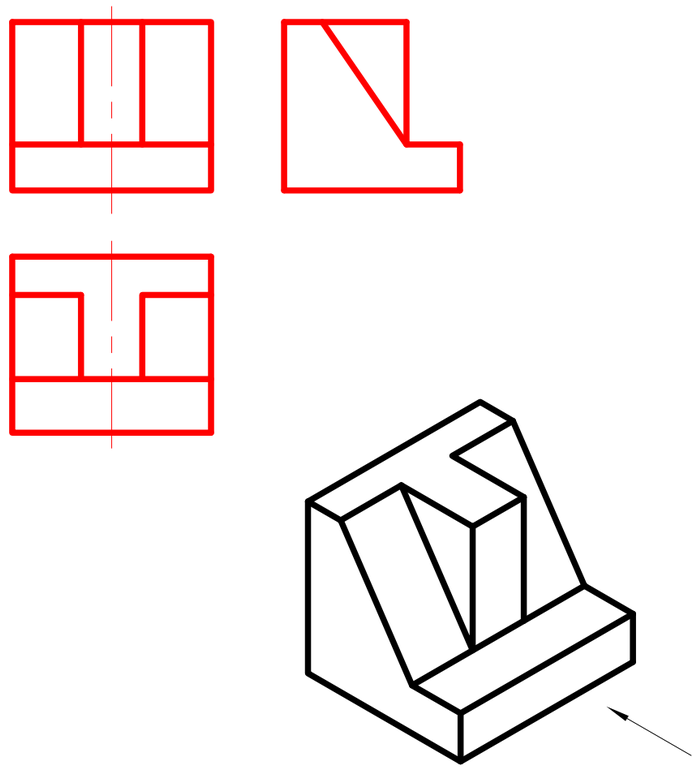
6.



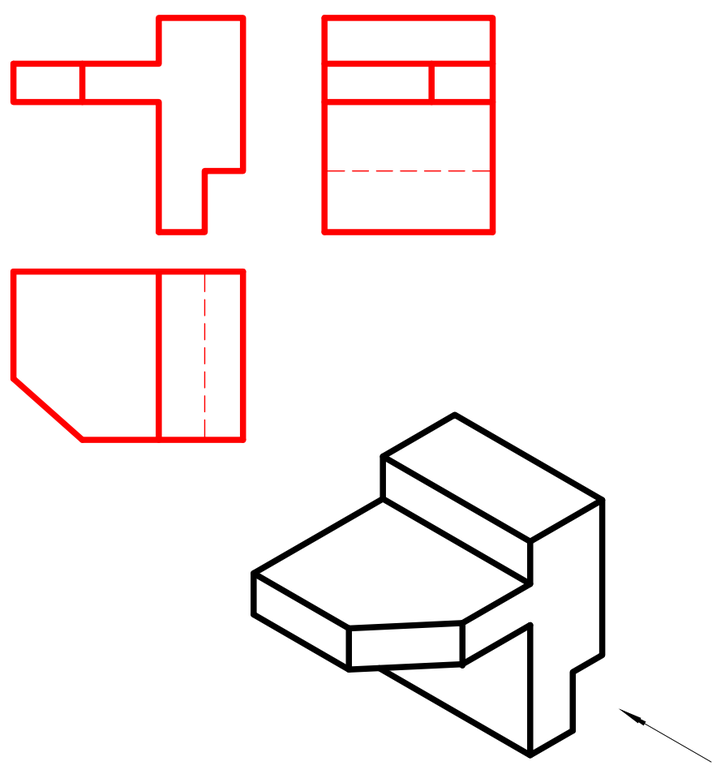
练习名称	三视图画法（一）	班级		学号		姓名		15

根据立体图画三视图（尺寸按1：1在立体图上直接量取并取整，箭头所指为主视图方向）。

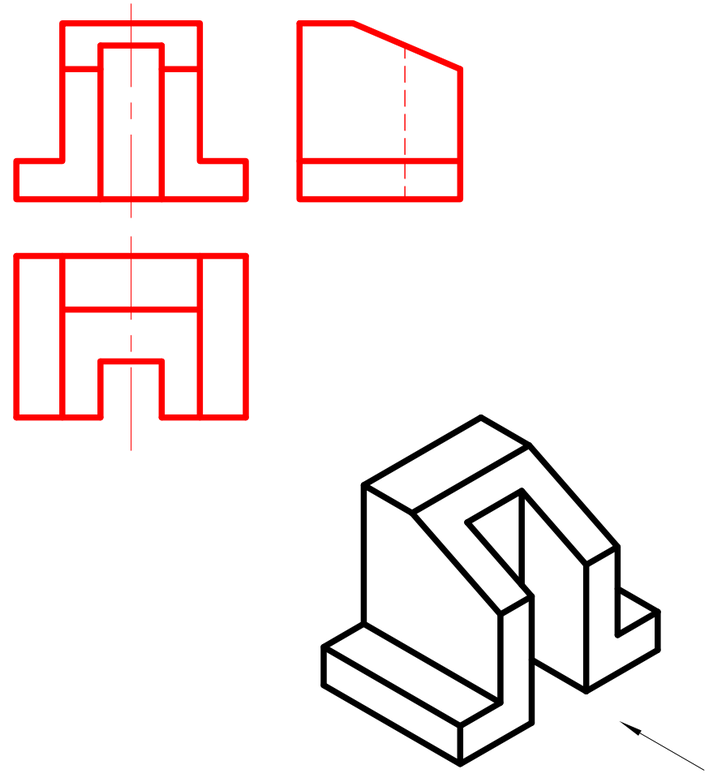
1.



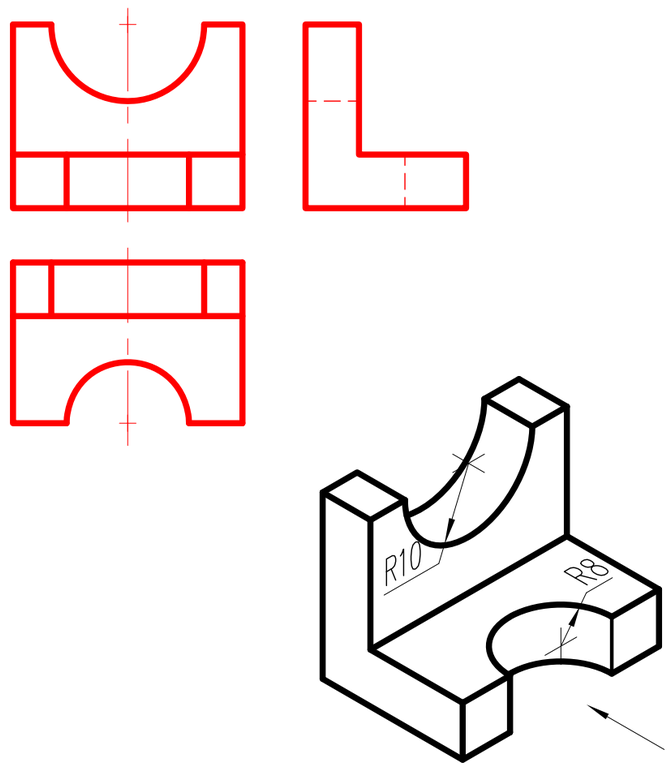
2.



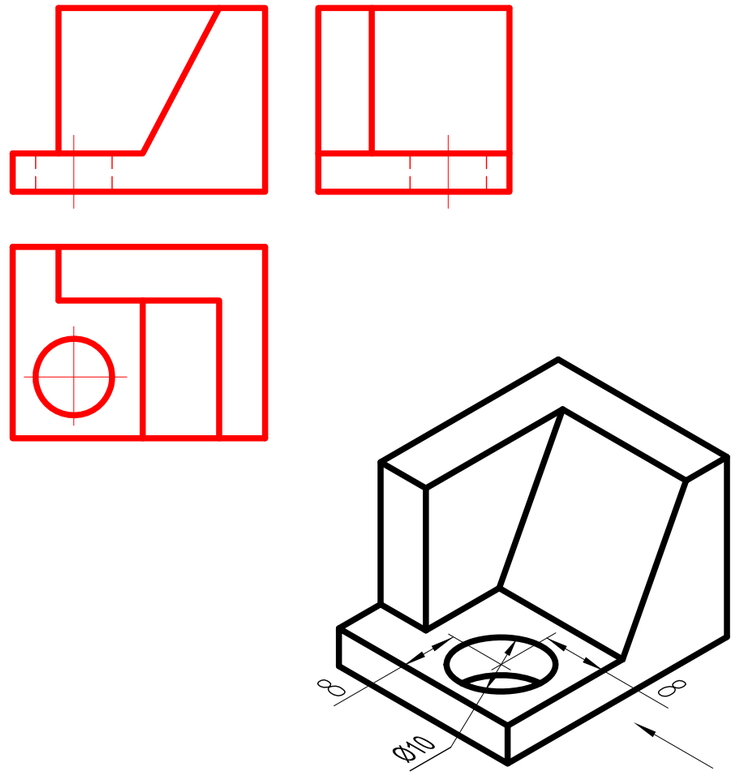
3.



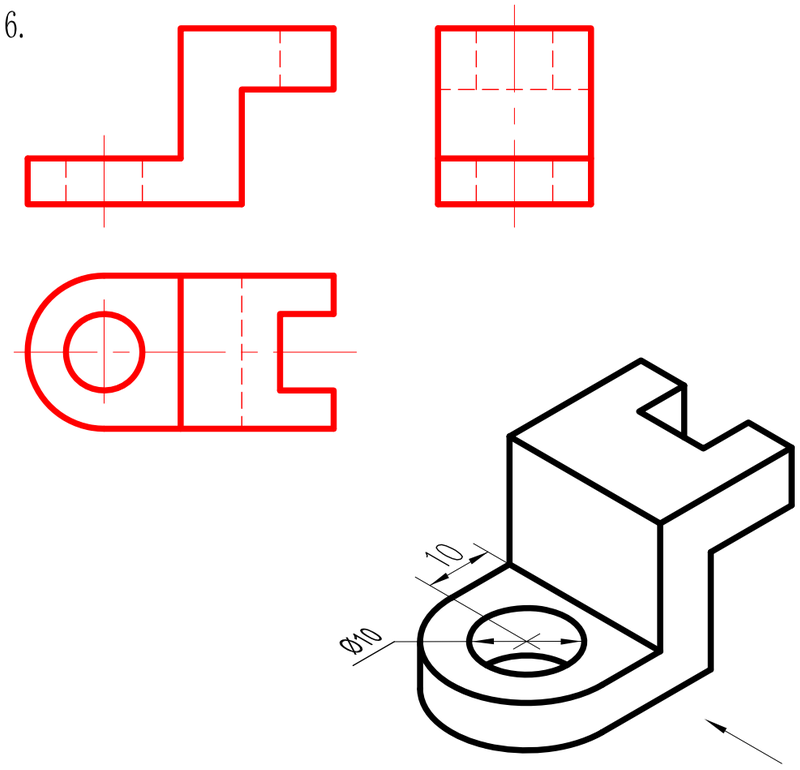
4.



5.



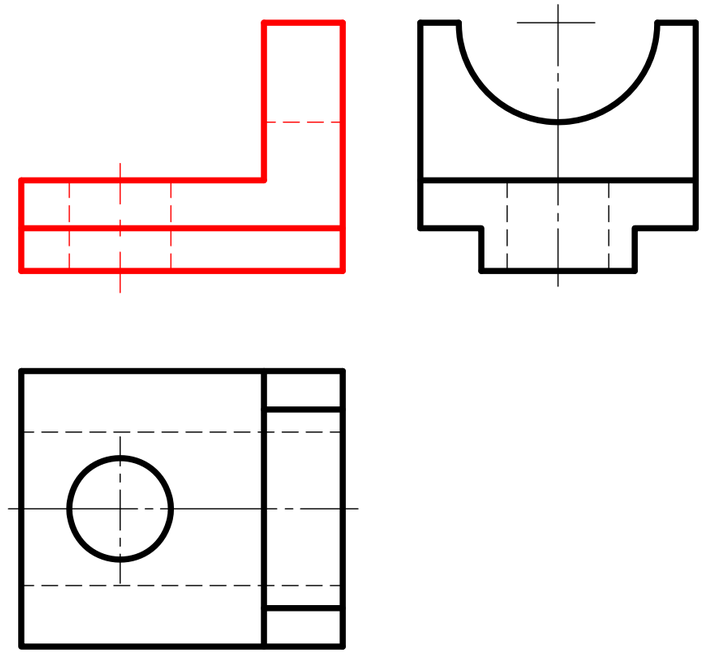
6.



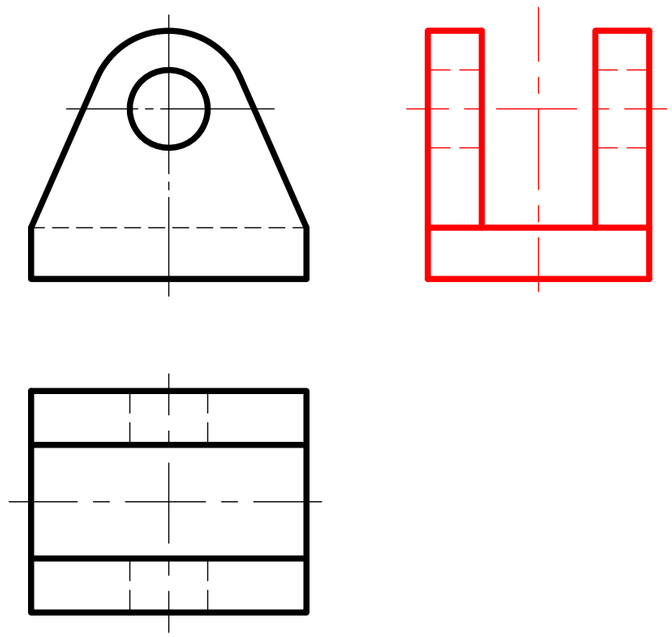
练习名称	三视图画法（二）	班级		学号		姓名		16

已知两视图求第三视图

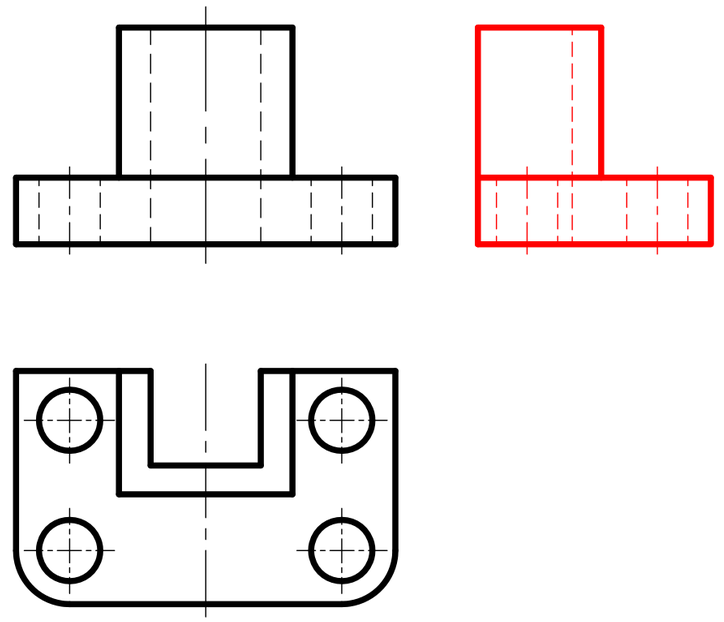
1.



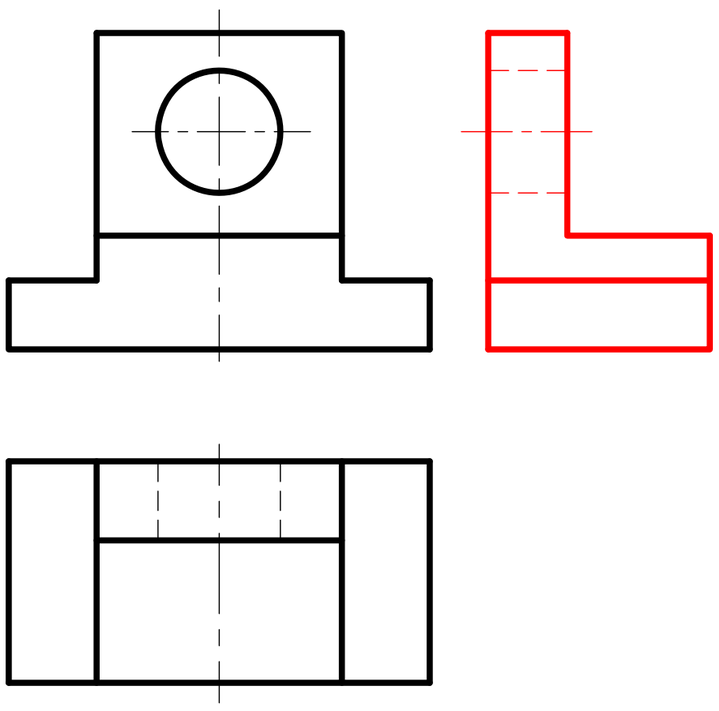
2.



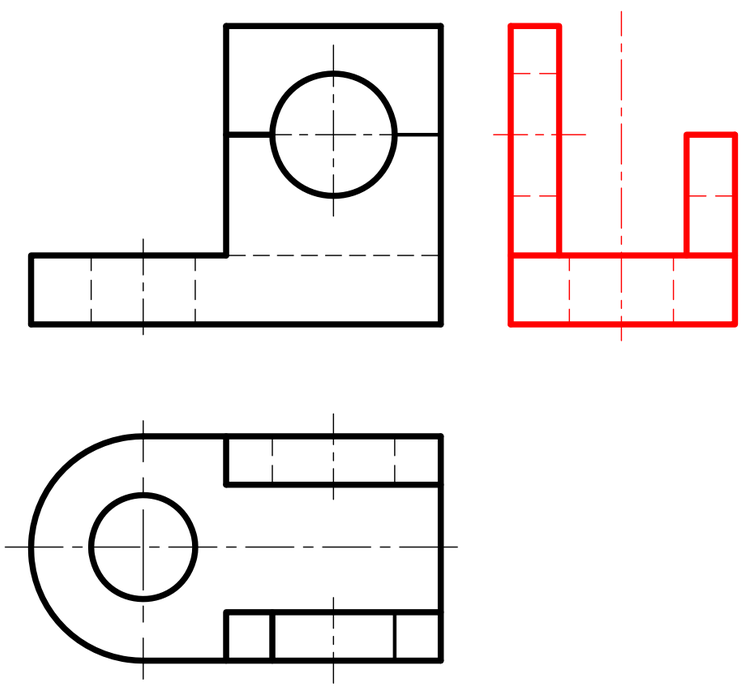
3.



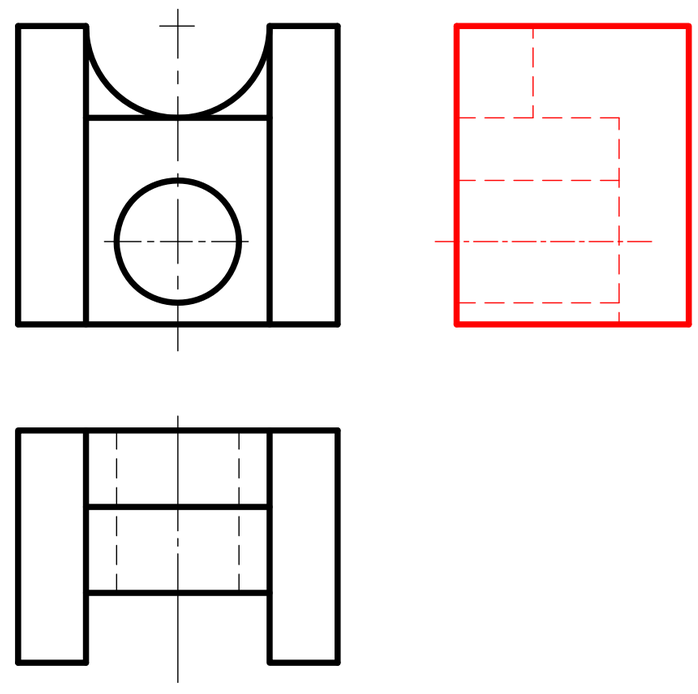
4.



5.



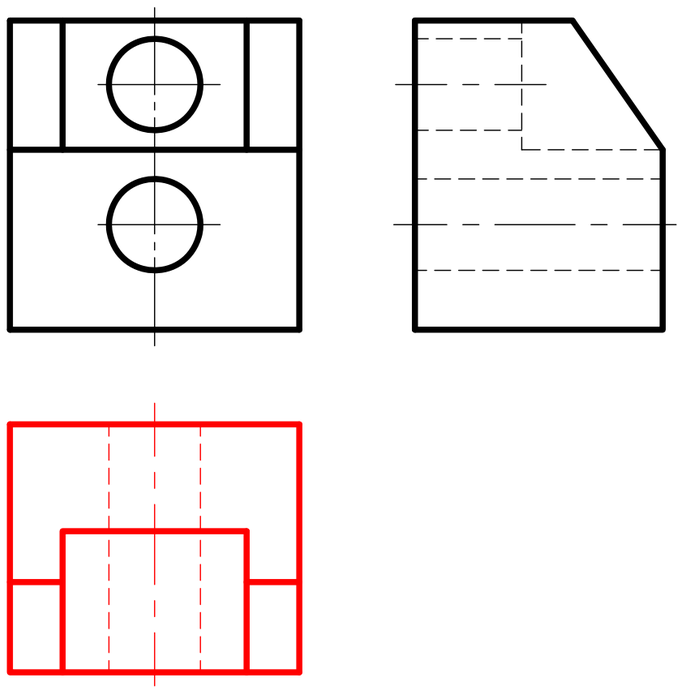
6.



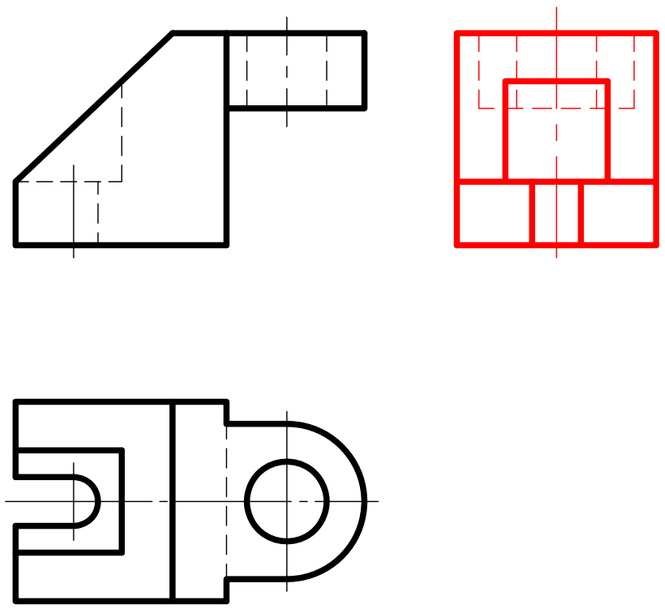
练习名称	看图（一）	班级		学号		姓名		19

已知两视图求第三视图

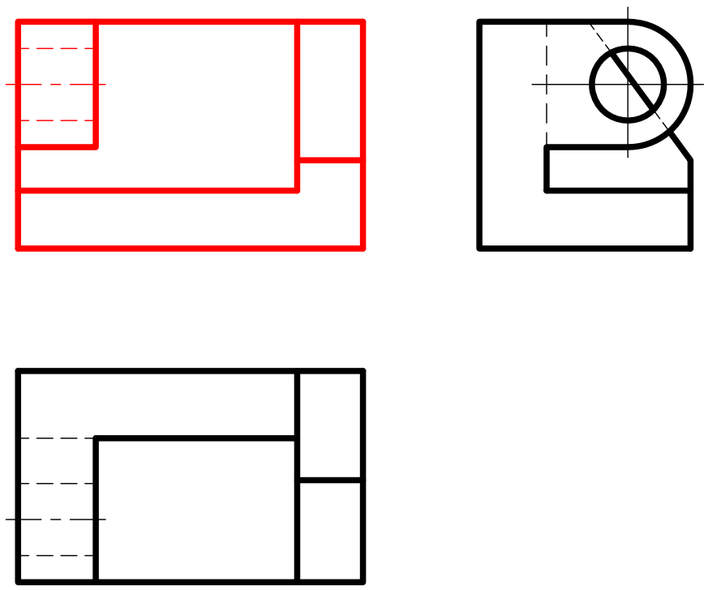
1.



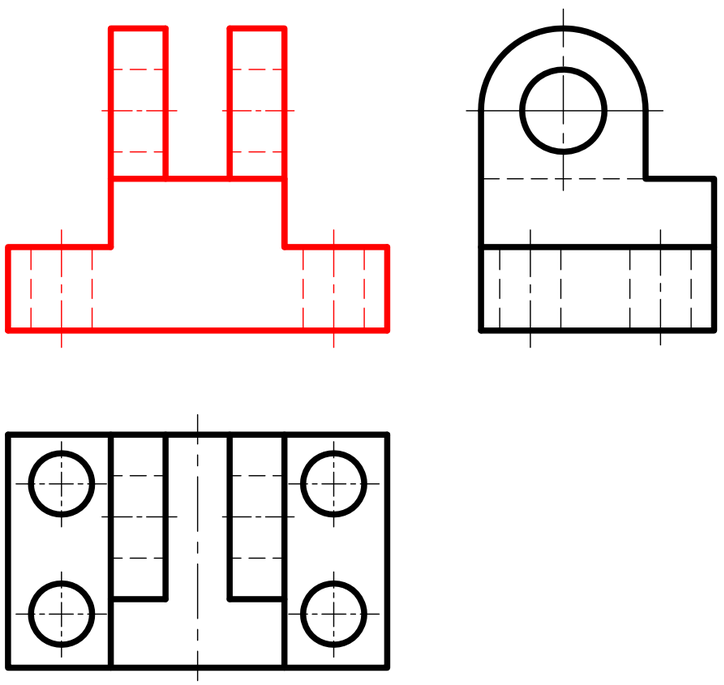
2.



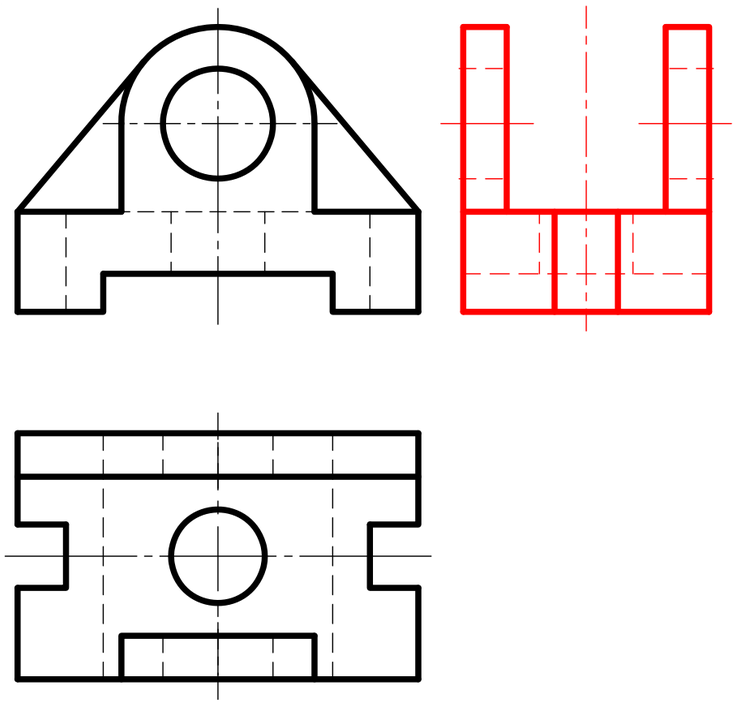
3.



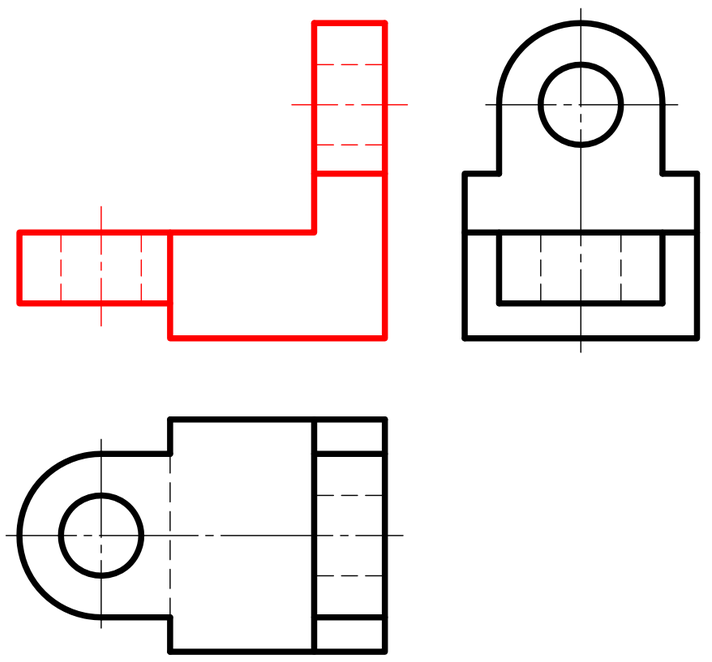
4.



5.



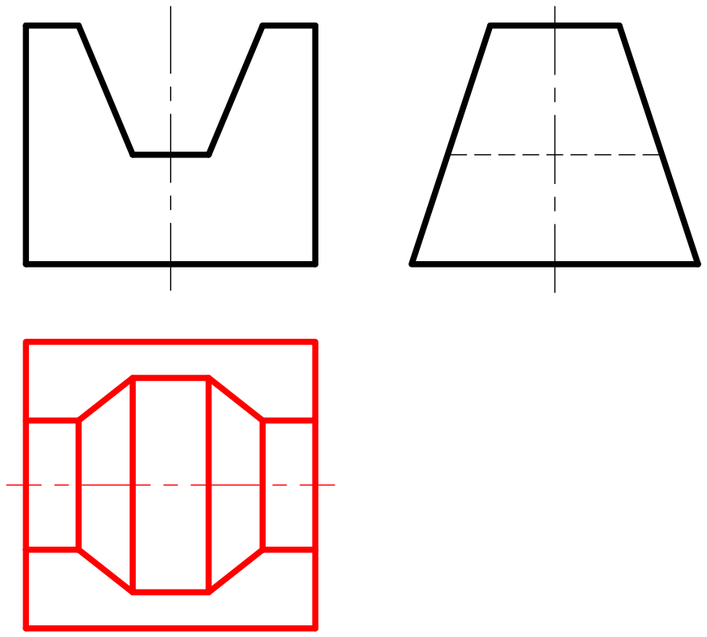
6.



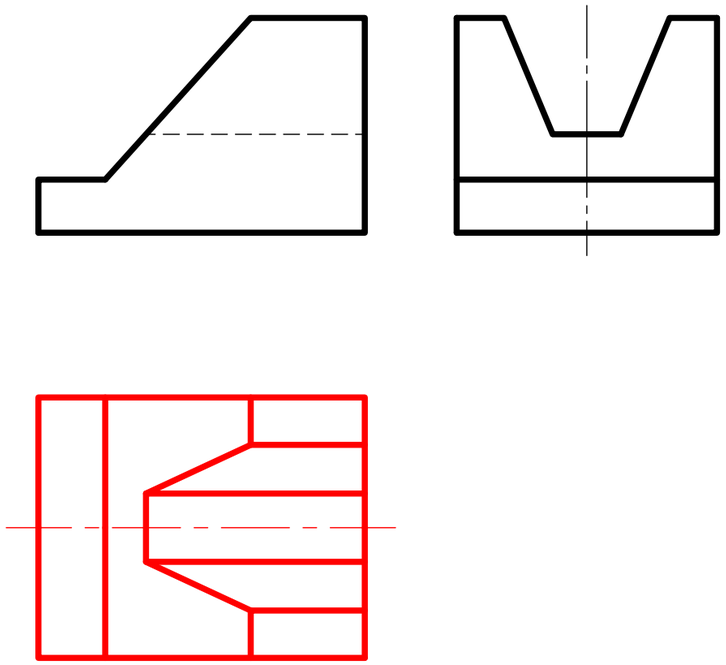
练习名称	看图（二）	班级		学号		姓名		20

已知两视图求第三视图

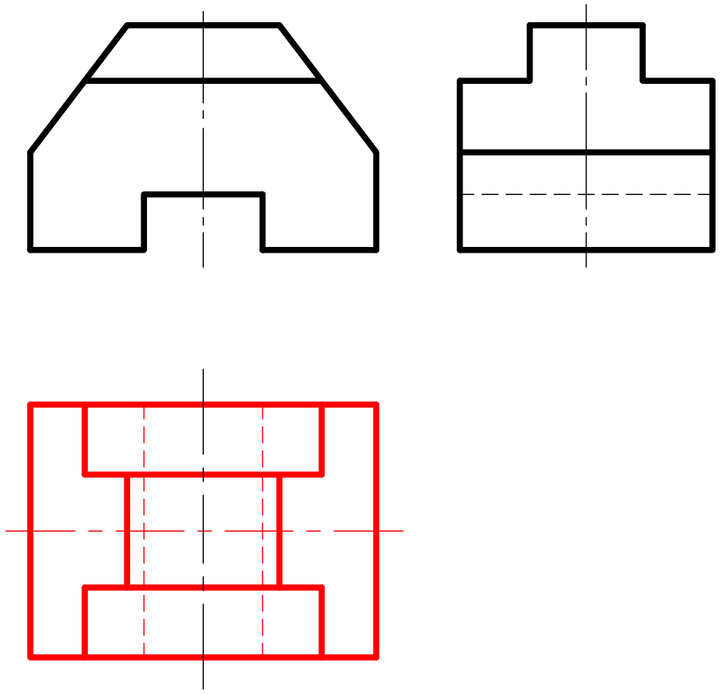
1.



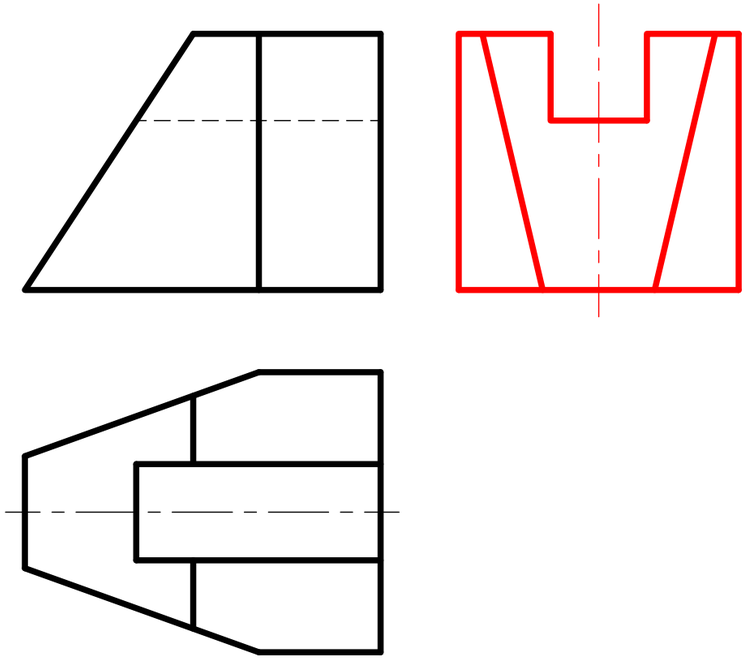
2.



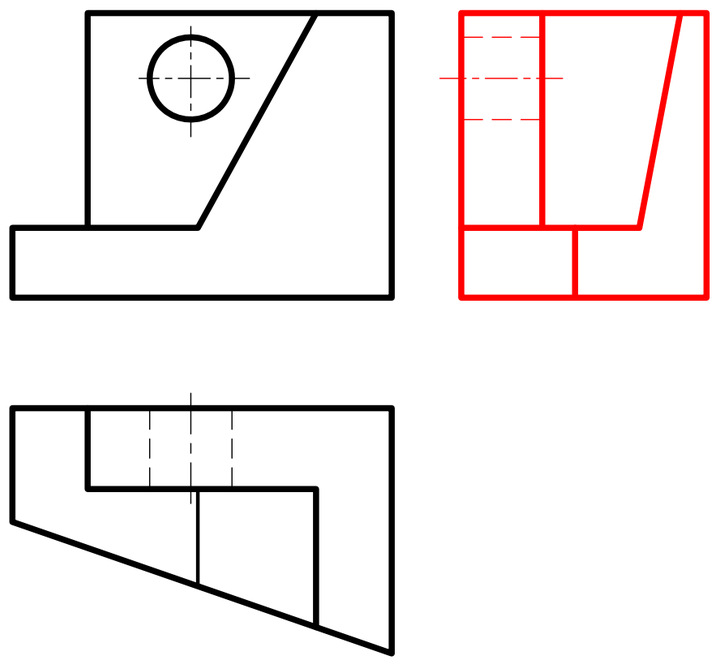
3.



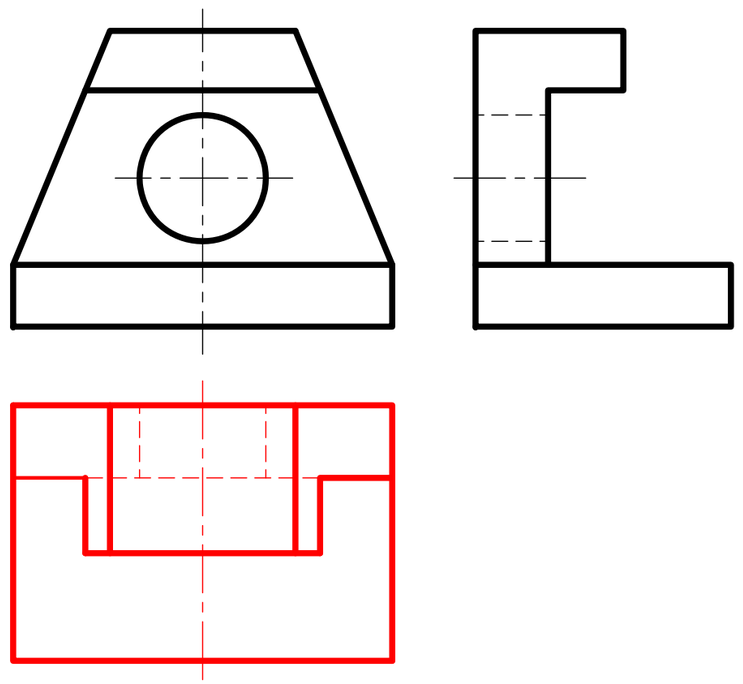
4.



5.



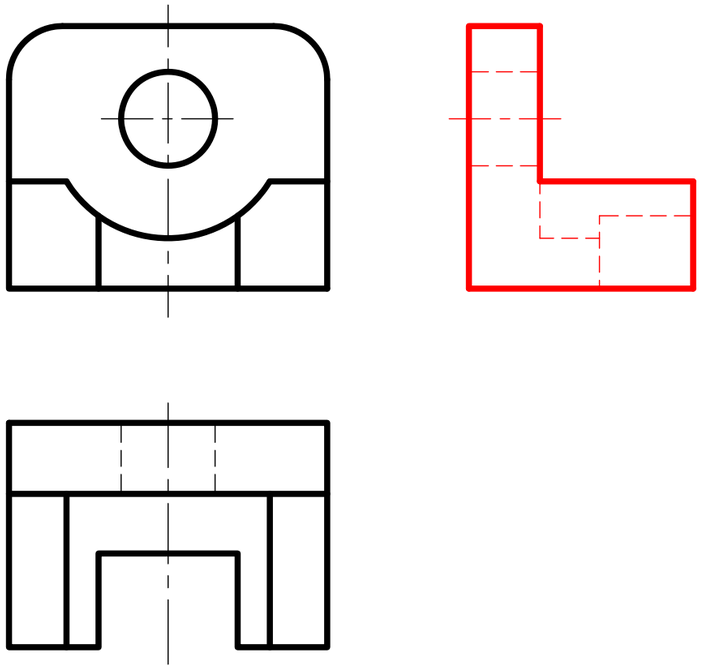
6.



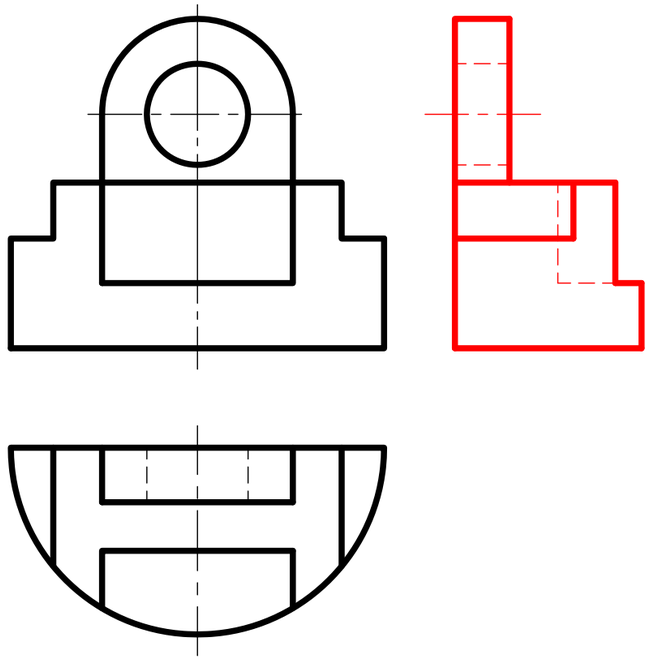
练习名称	看图（三）	班级		学号		姓名		21

已知两视图求第三视图

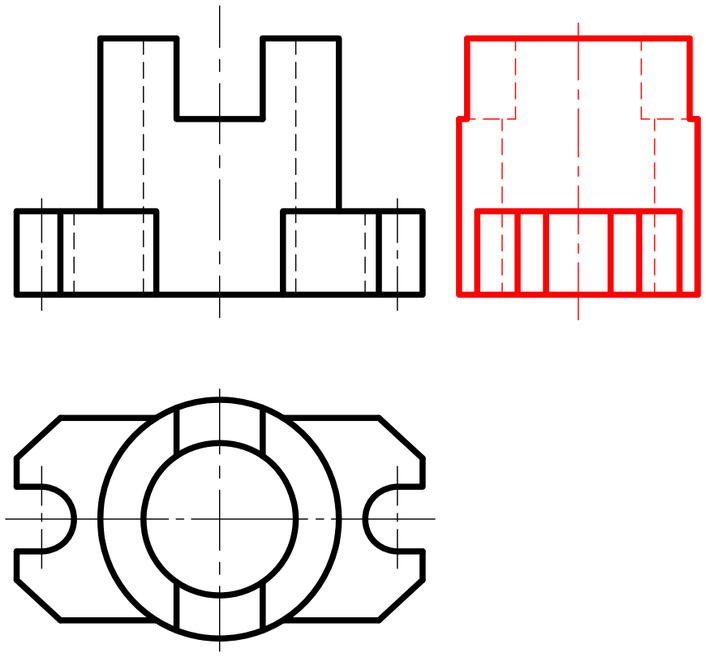
1.



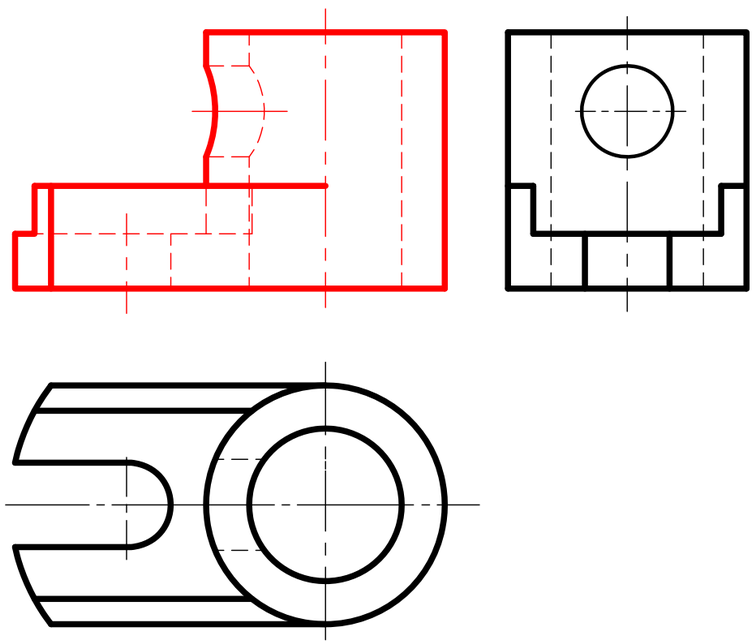
2.



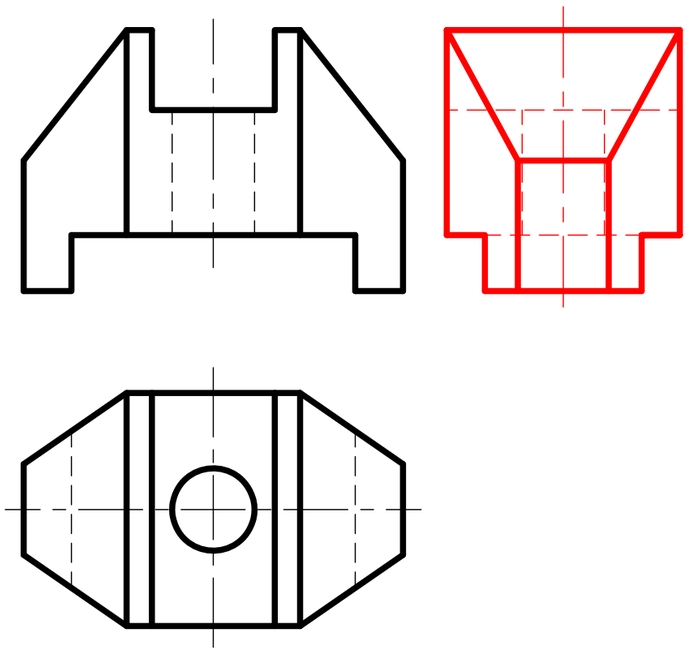
3.



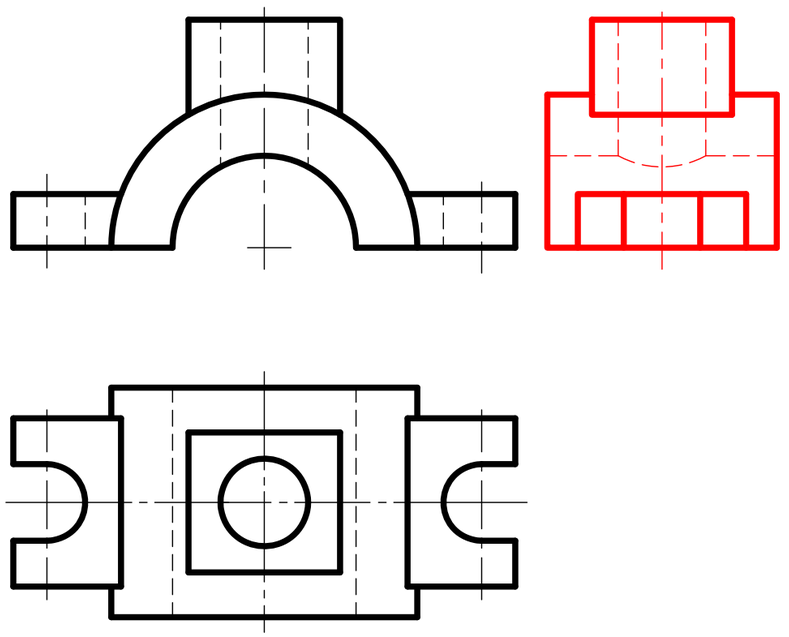
4.



5.



6.



练习名称	看图（四）	班级		学号		姓名		22