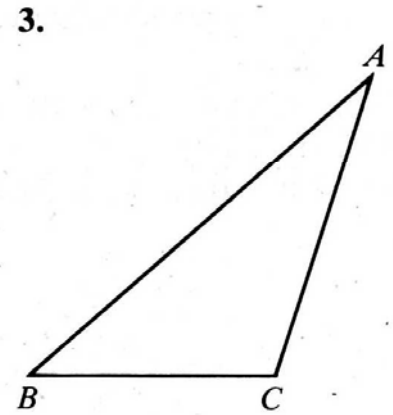
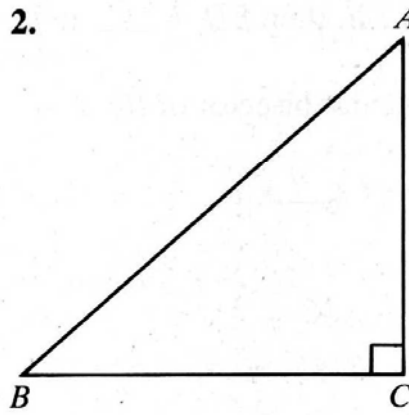
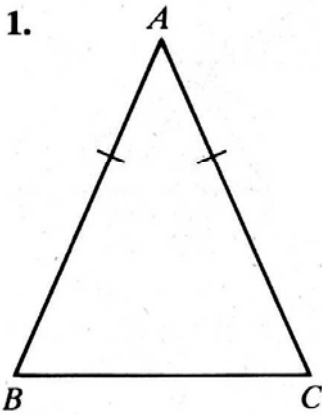


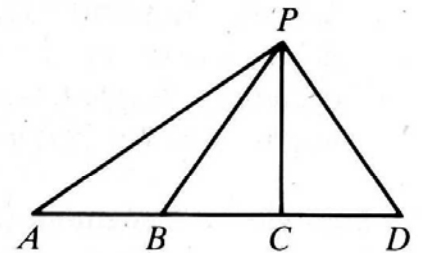
### 4.7 WORKSHEET

For each triangle below, draw the median from  $A$ , the altitude from  $A$ , and the perpendicular bisector of  $\overline{AB}$ .



**Complete.**

4. If  $AB = BC$ , then   ? is a median of  $\triangle APC$ .
5. If  $\overline{PC}$  is a perpendicular bisector of   ?, then  $BC = DC$ .
6. If  $\angle APD$  is a right angle, then   ? and   ? are altitudes of  $\triangle APD$ .
7. If  $\overline{PC}$  is a median of  $\triangle PBD$ , then   ? =   ?.
8. If  $BC = CD$  and  $\overline{PC} \perp \overline{BD}$ , then   ? is a perpendicular bisector of   ?.
9. If  $\overline{PC}$  and  $\overline{AC}$  are both altitudes of  $\triangle PCA$ , then  $\angle$    ? is a right angle.



**Complete.**

10. If  $\overrightarrow{BX}$  bisects  $\angle ABC$ , then  $\angle$    ?  $\cong$   $\angle$    ? and  $DX =$    ?.
11. If  $\overline{DX}$  is the perpendicular bisector of  $\overline{EB}$ , then  $ED =$    ? and  $XE =$    ?.
12. If  $XB = XF$ , then   ? is the perpendicular bisector of  $\overline{BF}$ , and  $\angle XBF \cong$    ?.
13. If  $XD = XG$ , then   ? is the bisector of  $\angle$    ?.

