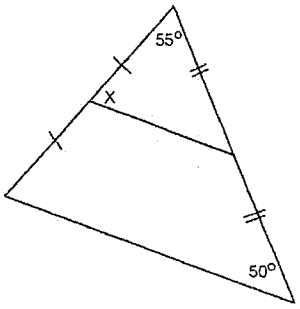
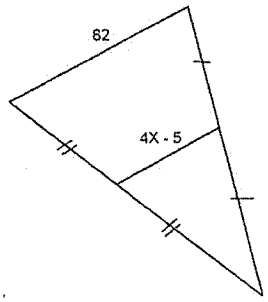
Geometry Review Sec 5-1, 5-2, 5-3, 5-5

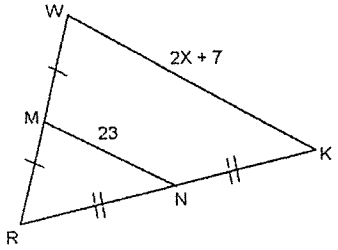
Find the value of x in each figure.

2.

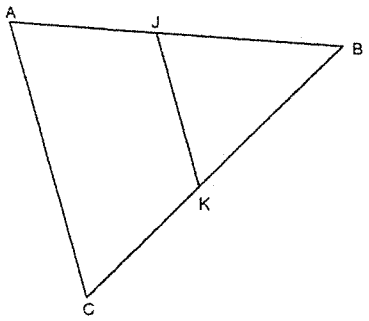


3.

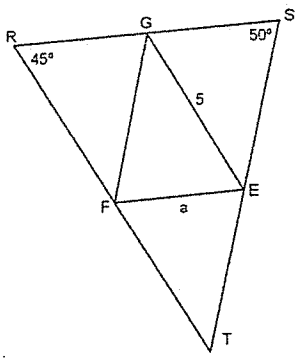




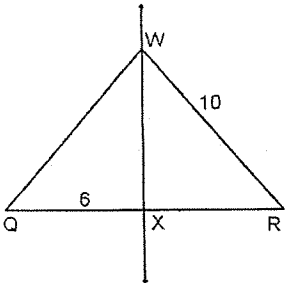
4. Points J and K are midpoints.
AJ=8, BK=10, and AC=13.
Find the perimeter of $\triangle ABC$ and $\triangle JBK$



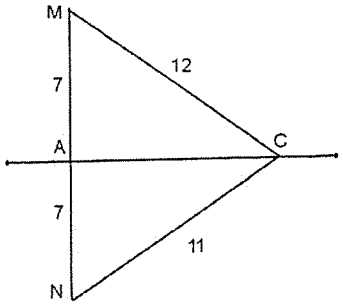
5. G, E and F are midpoints.
a) Given ST=12 write an expression for the perimeters of $\triangle RST$ and $\triangle EFG$
b) Find the measure of each angle of $\triangle EFG$



6. $\overleftrightarrow{WX}$ is the $\perp$ bisector of $\overline{QR}$
Find the lengths of
$\overline{XR}, \overline{QR}, \overline{QW}$ and $\overline{WX}$

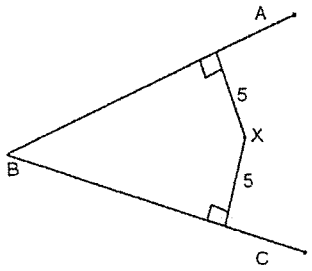


7. Is $\overleftrightarrow{AC}$ the $\perp$ bisector of $\overline{MN}$?
Explain your answer.

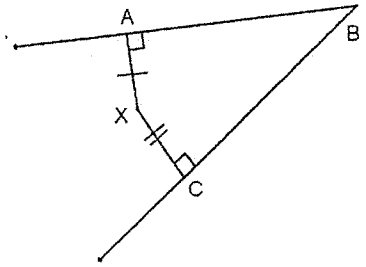


8. Determine if point X is on the angle bisector of $\angle ABC$

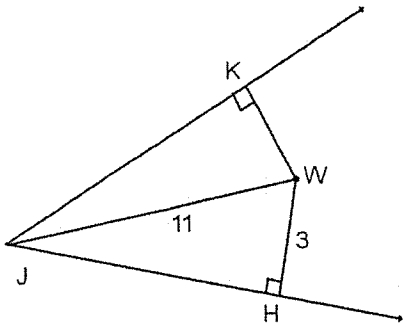
a.



b.

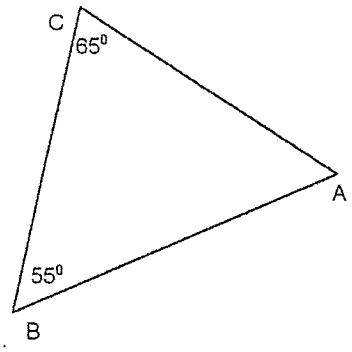


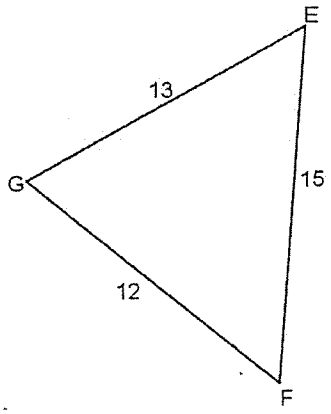
I. W is on the angle bisector of $\angle HJK$. Find the length of $\overline{JK}$



10. List the sides of $\triangle ABC$ n order from shortest to longest.

11. List the angles of $\triangle EFG$ in order from smalles to largest.





12. In $\triangle PQR$, $PR = 50, PQ = 40, QR = 37$. List the angles in order from smallest to largest.

13. In $\triangle XYZ$, $\angle X = 43°$ and $\angle Y = 47°$. List the sides in order from shortest to longest.

14. Can a triangle have sides with the given lengths.

a) 10, 4, 6 b) 8, 12, 5 c) 23, 41, 60

15. Given the two sides of a triangle are 7 and 9 state the possible lengths of the third sides as a compound inequality.

Geometry Review Sec 5-1, 5-2, 5-3, 5-5 ANSWERS

1. $x = 18$ 2. $x = 75°$ 3. $x = 11.5$ 4. Perimeter of $\triangle ABC = 49$ Perimeter of $\triangle JBK = 24.5$

5. Perimeter of $\triangle RST = 22 + 2a$ Perimeter of $\triangle EFG = 11 + a$
In $\triangle EFG$ $m\angle G = 85°, m\angle E = 45°, m\angle F = 50°$

6. $XR = 6, QR = 12, QW = 10, WX = 8$

7. No, Pt C isn't equidistant from the endpoints of $\overline{MN}$

8. a. Yes, X is equidistant from the two sides of $\angle ABC$
b. No, X isn't equidistant from the two sides of $\angle ABC$

9. $JK = 10.58$ 10. $\overline{AC}, \overline{BC}, \overline{AB}$ 11. $\angle E, \angle F, \angle G$

12. $\angle P, \angle R, \angle Q$ 13. $\overline{YZ}, \overline{XZ}, \overline{XY}$ 14. a) No b) Yes b) Yes

15. $2 < x < 16$