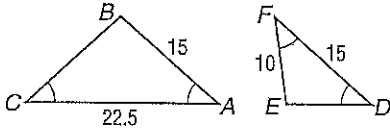


# 6 Chapter 6 Test, Form 2C

1. Of the 300 television sets sold at an electronics store last month, 90 were flat-screen TVs. Find the ratio of flat-screen TVs to other TVs sold last month.
2. Determine whether  $\triangle ABC \sim \triangle DEF$ . Justify your answer.

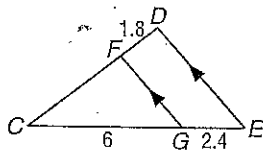


3. When a 5-foot vertical pole casts a 3-foot, 4-inch shadow, an oak tree casts a 20-foot shadow. Find the height of the tree.

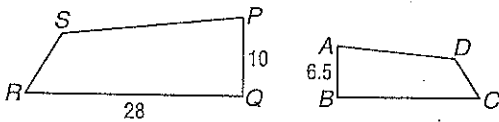
4. If quadrilateral  $ABCD \sim$  quadrilateral  $WXYZ$ ,  $AB = 15$ ,  $BC = 27$ , and the scale factor of  $WXYZ$  to  $ABCD$  is  $\frac{2}{3}$ , find  $XY$ .

5. The blueprint for a swimming pool is 8 inches by  $2\frac{1}{2}$  inches. The actual pool is 136 feet long. Find the width of the pool.

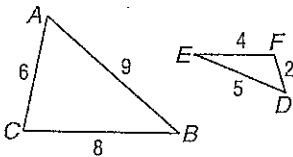
6. Find  $CD$ .



7. If quadrilateral  $ABCD \sim$  quadrilateral  $PQRS$ , find  $BC$ .



8. Determine whether  $\triangle ABC \sim \triangle DEF$ . Justify your answer.



9.  $\triangle ABC \sim \triangle XYZ$ ,  $AB = 12$ ,  $AC = 16$ ,  $BC = 20$ , and  $XZ = 24$ . Find the perimeter of  $\triangle XYZ$ .

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

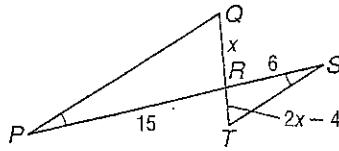
6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

For Questions 10 and 11, use the figure.

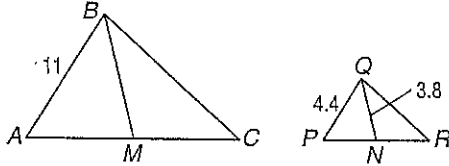


10. \_\_\_\_\_

11. \_\_\_\_\_

12. If  $\triangle ABC \sim \triangle PQR$  and  $\overline{BM}$  and  $\overline{QN}$  are medians, find  $BM$ .

12. \_\_\_\_\_

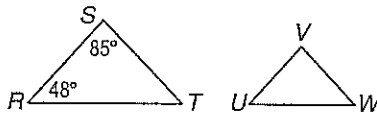


13. The ratio of the measures of the three sides of a triangle is 3:4:6. If the perimeter is 91, find the measure of the longest side.

13. \_\_\_\_\_

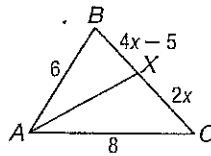
14. If  $\triangle RST \sim \triangle UVW$ , find  $m\angle W$ .

14. \_\_\_\_\_



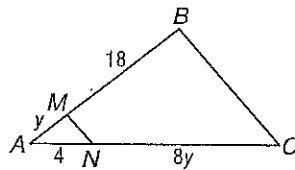
15. In  $\triangle ABC$ ,  $\overline{AX}$  bisects  $\angle BAC$ . Find  $x$ .

15. \_\_\_\_\_



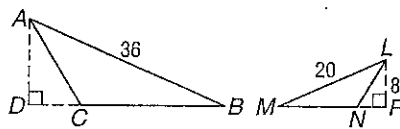
16. Find  $y$  so that  $\overline{MN} \parallel \overline{BC}$ .

16. \_\_\_\_\_



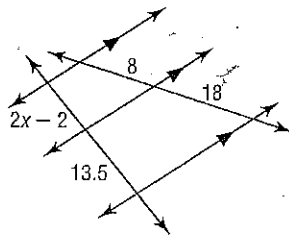
17.  $\triangle ABC \sim \triangle LMN$ , and  $\overline{AD}$  and  $\overline{LP}$  are altitudes. Find  $AD$ .

17. \_\_\_\_\_



18. Find  $x$ .

18. \_\_\_\_\_



Bonus Find  $EG$ .

B: \_\_\_\_\_

