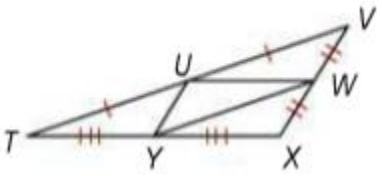
Day 5 – 5.2: p. 288 #7, 9 – 21 odd, 22 – 23, 26, 30, 43

Identify three pairs of parallel segments in each diagram.

7.



8.

Name the segment that is parallel to the given segment.

9. $\overline{AB}$

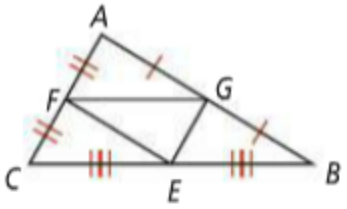
10. $\overline{BC}$

11. $\overline{EF}$

12. $\overline{CA}$

13. $\overline{GE}$

14. $\overline{FG}$



Points E, D, and H are the midpoints of the sides of $\triangle TUV$. $UV = 80$, $TV = 100$, and $HD = 80$.

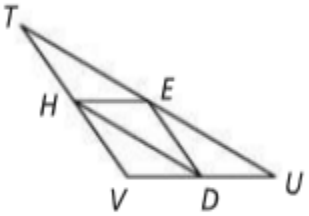
See Pr

15. Find HE.

16. Find ED.

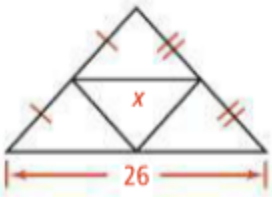
17. Find TU.

18. Find TE.

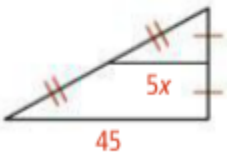


Algebra **Find the value of x.**

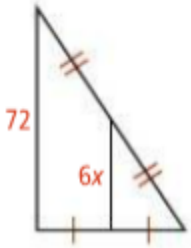
19.



20.

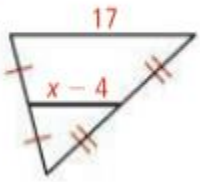


21.

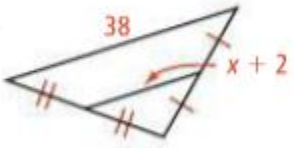


Algebra **Find the value of x.**

22.



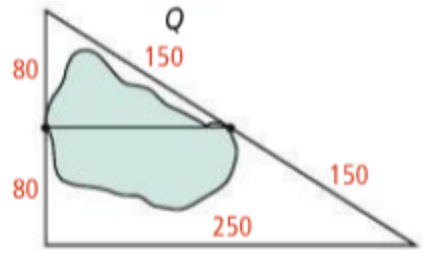
23.



26. Kayaking You want to paddle your kayak across a lake. To determine how far you must paddle, you pace out a triangle, counting the number of strides, as shown.

a. If your strides average 3.5 ft, what is the length of the longest side of the triangle?

b. What distance must you paddle across the lake?



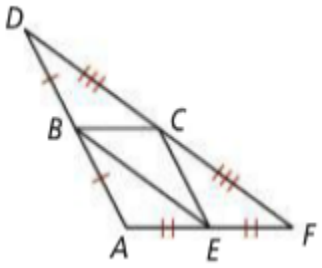
30. Coordinate Geometry The coordinates of the vertices of a triangle are $E(1, 2)$, $F(5, 6)$, and $G(3, -2)$.

a. Find the coordinates of H, the midpoint of $\overline{EG}$, and J, the midpoint of $\overline{FG}$.

b. Show that $\overline{HJ} \parallel \overline{EF}$.

c. Show that $HJ = \frac{1}{2}EF$.

Use the figure at the right for Exercises 42–44.



42. $DF = 24$, $BC = 6$, and $DB = 8$. Find the perimeter of $\triangle ADF$.

43. Algebra If $BE = 2x + 6$ and $DF = 5x + 9$, find DF.

44. Algebra If $EC = 3x - 1$ and $AD = 5x + 7$, find EC.