

**Unit 8 Review: Similarity**

1) Solve for x.

$$\frac{x-6}{7} = \frac{12}{x+11}$$

2) Solve for x.

$$\frac{x-13}{5} = \frac{12}{2x}$$

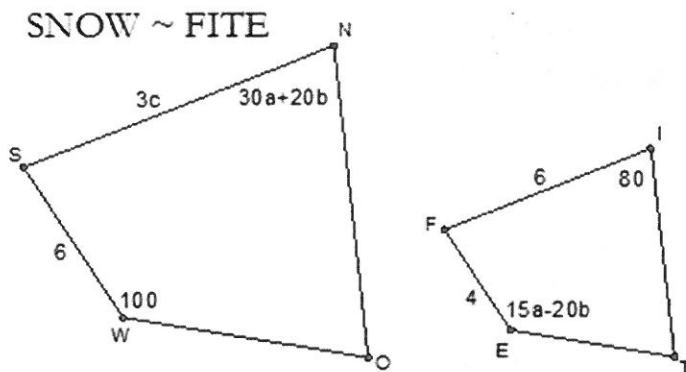
3) Solve for x.

$$4x^2 - 30 = x^2 + 18$$

4) Solve for x.

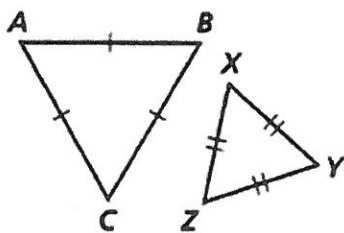
$$2(x-3)^2 - 162 = 0$$

5) Solve for a and b.

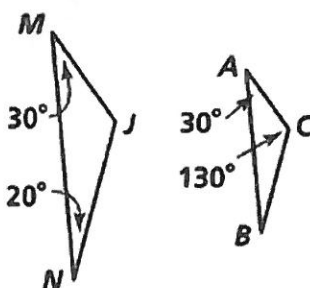


For 6 – 8, decide if the triangles are similar. If so write why and give a similarity statement. If not, say why not.

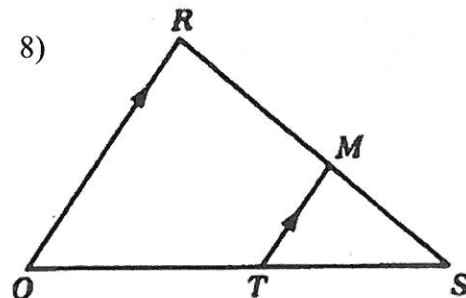
6)



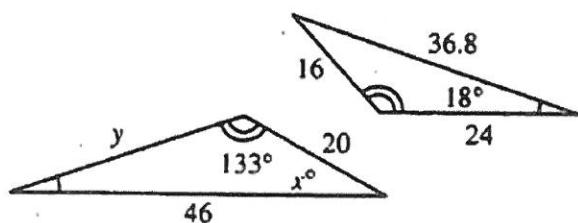
7)



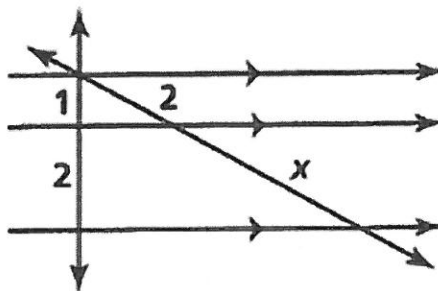
8)



9) The two triangles are similar, solve for  $x$  and  $y$ .



10) Solve for  $x$ .



$x = \underline{\hspace{2cm}}$ ;  $y = \underline{\hspace{2cm}}$

11) In the figure,  $\overline{WX} \parallel \overline{YZ}$ . Which are possible values for  $VX$  and  $XZ$ ? (TEKS G.8.A)

- (A)  $VX = 5$  and  $XZ = 5$
- (B)  $VX = 6$  and  $XZ = 4$
- (C)  $VX = 9$  and  $XZ = 6$
- (D)  $VX = 8$  and  $XZ = 12$

