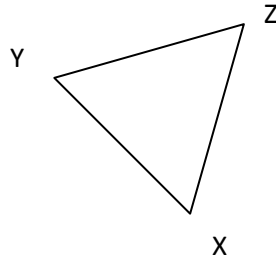
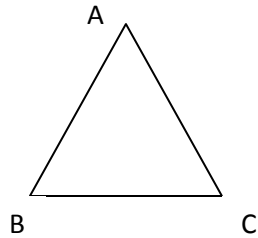


Algebra 2
Unit: Geometry
Section: Geometry of Triangles

Review Worksheet Key

1) Triangle ABC is congruent to triangle XYZ.



a. The measure of angle B is 42 degrees and the measure of angle C is 39 degrees. The measure of angle Y is $5a + 10$ degrees. Find the value of a.

$$5a + 10 = 42$$

$$a = 6.4$$

b. The measure of angle C is $10b + 12$ degrees. The measure of angle X is 22 degrees and the measure of angle Y is 48 degrees. Find the value of b.

$$10b + 12 + 22 + 48 = 180$$

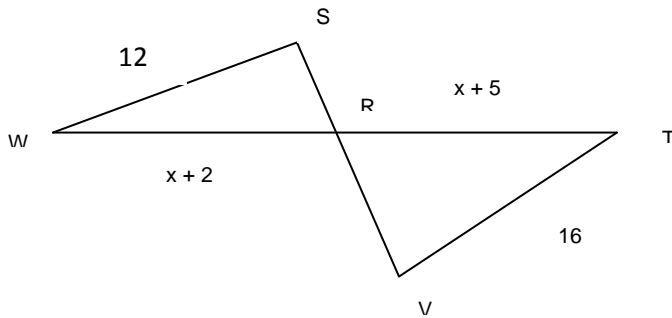
$$b = 9.8$$

c. Side AC equals $3c - 40$. Side XY equals 100 and side XZ equals 102. Find the value of c.

$$3c - 40 = 102$$

$$c = 47.33$$

2. Triangles WSR and TVR are similar.



a. Find the value of x .

$$\begin{aligned}\frac{x+2}{x+5} &= \frac{12}{16} \\ 16x + 32 &= 12x + 60 \\ 4x &= 28 \\ x &= 7\end{aligned}$$

b. Angle S measures 88 degrees. Angle SRW measures 48 degrees. Angle T measure $2b + 6$ degrees. Find the value of b .

$$\begin{aligned}88 + 48 + 2b + 6 &= 180 \\ b &= 19\end{aligned}$$