

Geometry
Review Ch. 7

Quiz 7.7

Ch. 7 test is Thurs.

Solve each proportion. (Lesson 7-1)

1. ~~$\frac{2}{5} = \frac{x}{25}$~~

$$\frac{5x}{5} = \frac{50}{5}$$

3. ~~$\frac{(y+4)}{11} = \frac{(y-2)}{9}$~~

$$x = 10$$

$$\begin{array}{ccc} 38.6 & 64.5 & 17.4 \\ \uparrow & \uparrow & \uparrow \\ 3 & 5 & 6 \end{array}$$

$$3:5:6$$

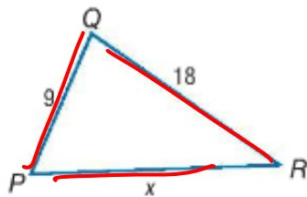
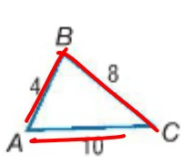
$$3x + 5x + 6x = 180$$

$$x = 12.9 \quad \frac{14x}{14} = \frac{180}{14}$$

$$\begin{array}{r} 11(y-2) = 9(y+4) \\ 11y - 22 = 9y + 36 \\ -9y + 22 \quad -9y + 22 \\ \hline 2y = 58 \end{array}$$

Each pair of polygons is similar. Find the value of x . (Lesson 7-2)

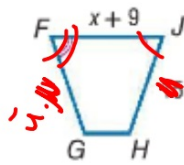
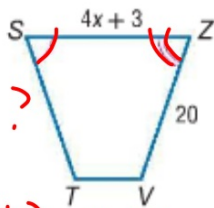
6.



$$\frac{4}{9}$$

$$\frac{8}{18} = \frac{10}{x}$$

7.



$$\frac{4x+3}{20} = \frac{x+9}{15}$$

$$\frac{8x}{8} = \frac{180}{8}$$

$$x = 22,5$$

8. **MULTIPLE CHOICE** Two similar polygons have a scale factor of 3:5. The perimeter of the larger polygon is 120 feet. Find the perimeter of the smaller polygon. (Lesson 7-2)

A 68 ft

C 192 ft

B 72 ft

D 200 ft

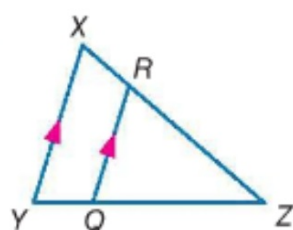
PT p. 529
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$$\begin{array}{l} \text{sm} \\ \text{lg} \end{array} \frac{3}{5} = \frac{x}{120}$$

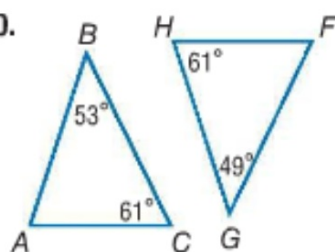
$$\begin{aligned} 5x &= 3 \cdot 120 \\ x &= 72 \end{aligned}$$

Determine whether the triangles are similar. If so, write a similarity statement. If not, what would be sufficient to prove the triangles similar? Explain your reasoning. (Lesson 7-3)

9.



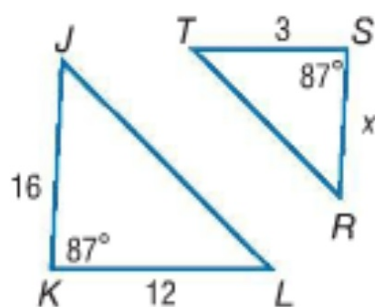
10.



ALGEBRA Identify the similar triangles. Find each measure.

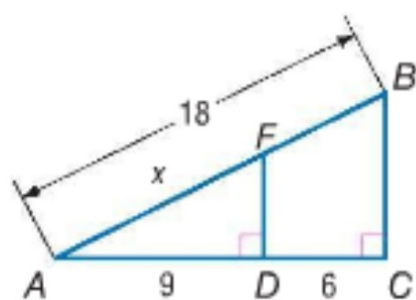
(Lesson 7-3)

11. SR



Not drawn to scale...which side is corresp to JK?

12. AF



ALGEBRA Find x and y . (Lesson 7-4)

14.

