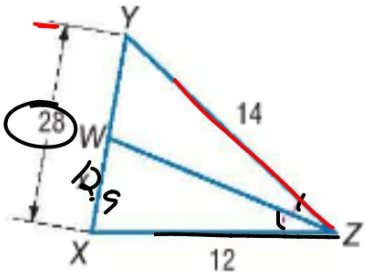
Geometry
Review Ch. 7
Quiz 7.5-7.6 today

Quiz 7.7 Wed.
Ch. 7 test is Thurs.

Find x.



$x \approx 12.9$

$yw = 15.1$

$$\frac{12}{x} = \frac{14}{28-x}$$

$$14x = 336 - 12x$$

$+12x \qquad +12x$

$$26x = 336$$

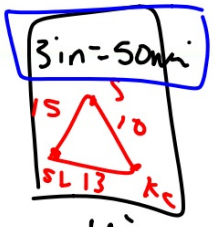
$$\frac{26x}{26} = \frac{336}{26}$$

29. MAPS The scale given on a map of the state of Missouri indicates that 3 inches represents 50 miles. The cities of St. Louis, Springfield, and Kansas City form a triangle. If the measurements of the lengths of the sides of this triangle on the map are 15 inches, 10 inches, and 13 inches, find the perimeter of the actual triangle formed by these cities to the nearest mile.

$\frac{3\text{ in}}{50\text{ mi}} = \frac{38\text{ in}}{x}$

$\frac{3x}{3} = \frac{1900}{3}$

633 miles



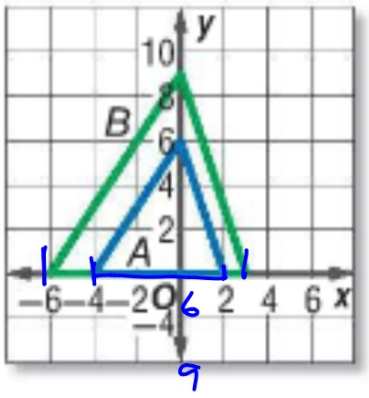
Miss.

$P = 38$ in.

pre image

Determine whether the dilation from *A* to *B* is an *enlargement* or a *reduction*. Then find the scale factor of the dilation.

$E = \frac{3}{2}$



$\frac{6}{9}$

$\frac{9}{6}$

Example 7

In the scale of a map of the Pacific Northwest 1 inch = 20 miles. The distance on the map between Portland, Oregon, and Seattle, Washington, is 8.75 inches. Find the distance between the two cities.

$$\frac{1 \text{ in}}{20 \text{ mi}} = \frac{8.75 \text{ in}}{x \text{ mi}}$$

$$x = 175 \text{ mi}$$

scale factor: same units
SF = SAME, FOOL

12. SHORT RESPONSE Jimmy has a diecast metal car that is a scale model of an actual race car. If the actual length of the car is 10 feet and 6 inches and the model has a length of 7 inches, what is the scale factor of model to actual car?

SF

10·12 + 6
126

126 : 7 18 : 1

7 : 126 1 : 18