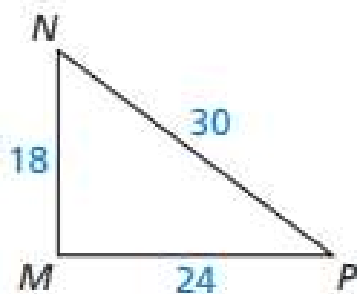
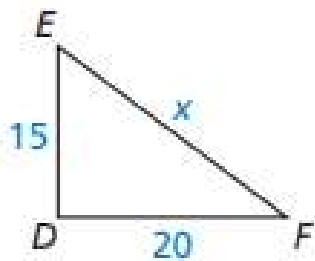


Ch. 8 Review!

The POLYGONS ARE SIMILAR. Write a scale factor and find the value of x.



$$\frac{DE}{MN} = \frac{EF}{NP} = \frac{DF}{MP}$$

$$\frac{x}{30} = \frac{20}{24}$$

$$\frac{x}{30} = \frac{5}{6}$$

$$30 \cdot 5 = 6x$$

$$\frac{150}{6} = \frac{6x}{6}$$

$$25 = x$$

$$\frac{20}{24} = \frac{5}{6}$$

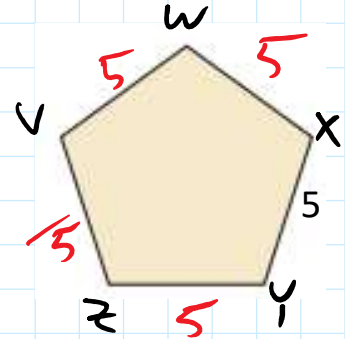
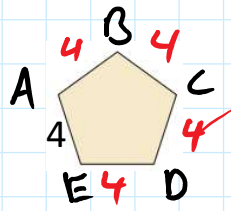
Determine if the two regular pentagons are similar.

$ABCDE \sim VWXYZ$

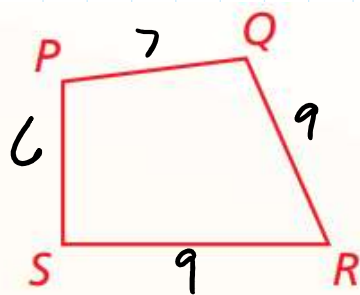
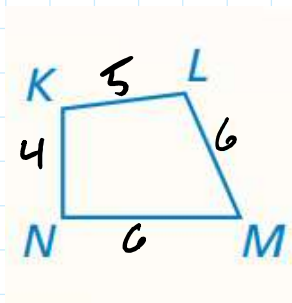
$$\frac{AD}{VL} = \frac{DC}{WX} = \frac{CD}{XY} = \frac{DE}{YZ} = \frac{EA}{ZV}$$

$$\frac{4}{5} = \frac{4}{5}$$

yes, \sim



Determine whether the polygons are similar. If they are, write a similarity statement.



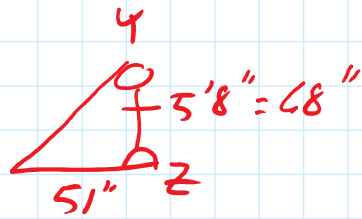
$$\frac{LM}{QR} = \frac{MN}{RS} = \frac{NK}{SP} \neq \frac{KL}{PQ}$$

$$\frac{6}{9} = \frac{6}{9} = \frac{4}{6} \neq \frac{5}{7}$$

$$\frac{2}{3} = \frac{2}{3} = \frac{2}{3} \neq \frac{5}{7}$$

Not similar

A school flagpole casts a shadow that is 45 feet long. At the same time, a boy who is five feet eight inches tall casts a shadow that is 51 inches long. How tall is the flagpole to the nearest foot?



$$\frac{AD}{XY} = \frac{KL}{YZ} = \frac{CA}{ZX}$$

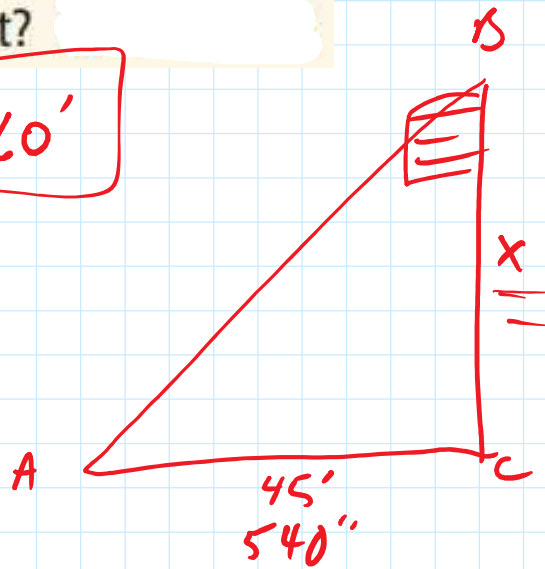
$$\frac{x}{68} = \frac{540}{51}$$

$$51x = 68 \cdot 540$$

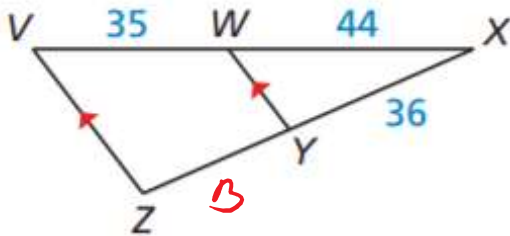
$$\frac{51x}{51} = \frac{36720}{51}$$

$$x = 720''$$

$$x = 60'$$



Find the length of \overline{YZ} .



$$\frac{VW}{WX} = \frac{ZY}{YX}$$

$$\frac{35}{44} = \frac{B}{36}$$

$$35 \cdot 36 = 44B$$

$$\frac{1260}{44} = \frac{44B}{44}$$

$$B \approx 28.64$$

$$\frac{636}{22}$$

$$\frac{315}{11} = 18$$

20 total questions
Notecard allowed
Good Luck!!
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