Curriculum Outcomes:

(SS3) Demonstrate an understanding of similarity of polygons.

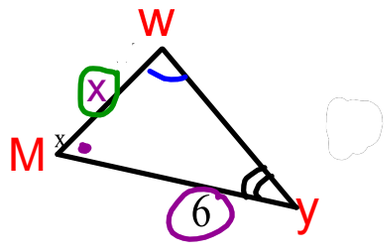
(SS4) Draw and interpret scale diagrams of 2-D shapes.

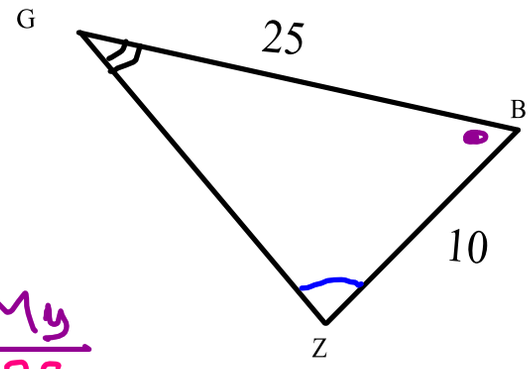
(SS5) Demonstrate an understanding of line and rotation symmetry.

Student Friendly:

How are diagrams related in size? To increase a length by a certain number be it a fraction or a whole number.

If $\triangle MWY \sim \triangle BZG$, determine the value of X





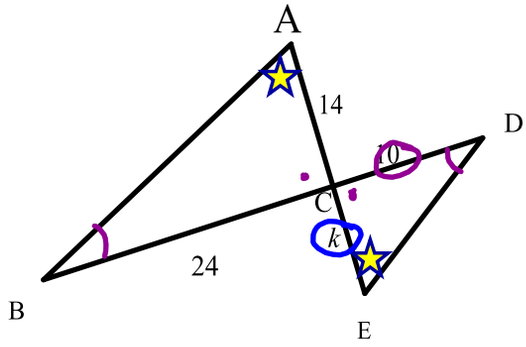
$\frac{WM}{ZB} \quad \frac{My}{BG}$

$\frac{x}{10} = \frac{6}{25}$

$x = \frac{10(6)}{25}$

$x = 2.4$

Solve for "k"



Hint:

Start by proving triangles are similar first

$\frac{CE}{CA} = \frac{CD}{CB}$

$\frac{K}{14} = \frac{10}{24}$

$\angle A = \angle E$

$\angle B = \angle D$

$\angle C = \angle C$

$\triangle ABC \sim \triangle EDC$ (AAA)

$K = \frac{10(14)}{24}$

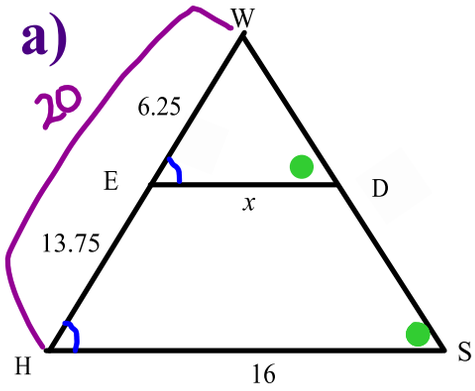
$K = 5.8\overline{3}$

Try This !!

Solve for x .

Remember to include a similarity statement

a)

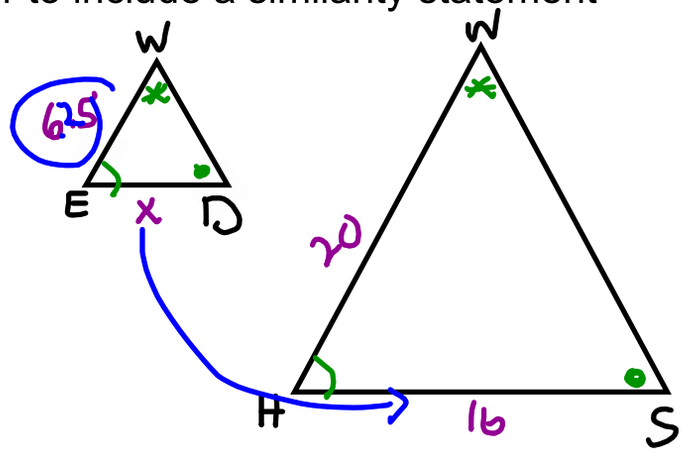


$\frac{ED}{HS} = \frac{WE}{WH}$

$\frac{x}{16} = \frac{6.25}{20}$

$x = \frac{16(6.25)}{20}$

$x = 5$



$\angle W = \angle W$

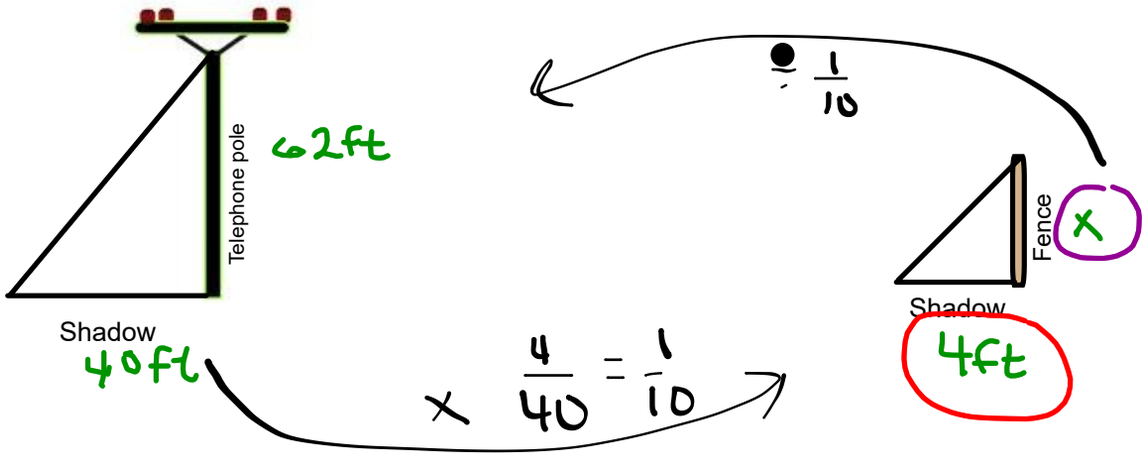
$\angle E = \angle H$

$\angle D = \angle S$

$\triangle WED \sim \triangle WHS$ (AAA)

A telephone pole that is 62 ft tall cast a shadow that is 40 ft long. Find the height of a fence pole that cast a 4 ft shadow.

Assume the triangles are similar



$$\frac{x}{62} = \frac{4}{40}$$

$$x = \frac{4(62)}{40}$$

$$x = 6.2$$

Homework

Tonight's

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4ab, 5bc, 6(bc),7, 10, 11,12,14