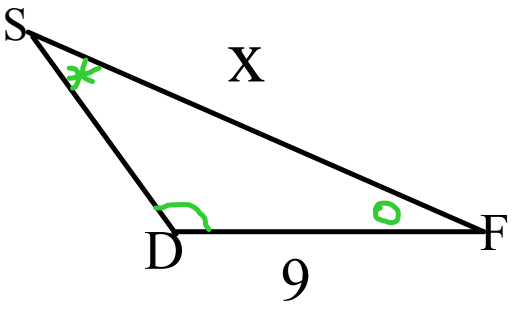
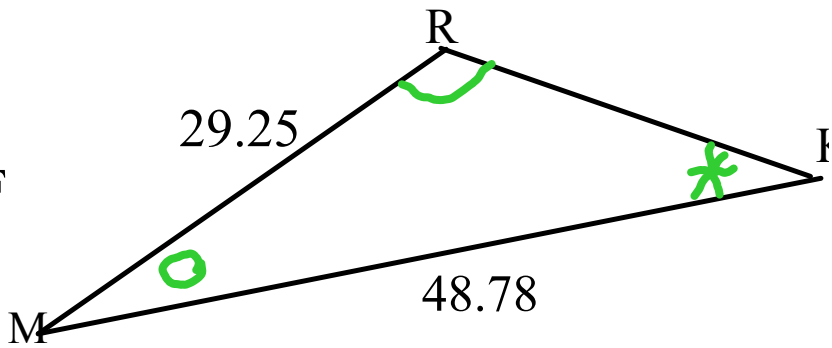
Similar Triangles

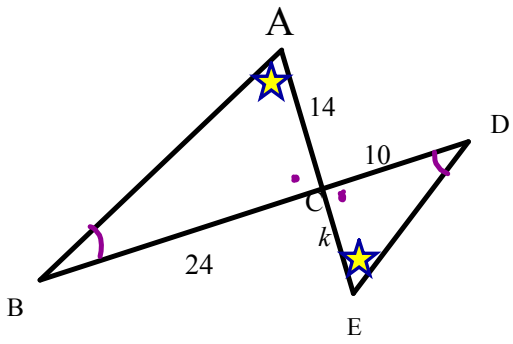
Day 2

i)Determine if the triangles are similar
ii) Write the Ratios
iii) Fill in ratios
iv) solve for "x"



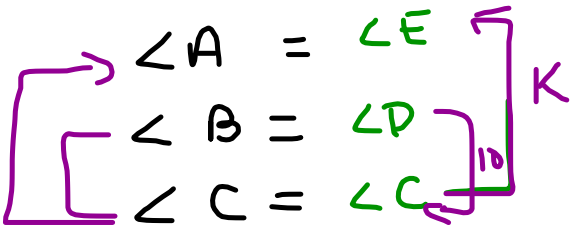


Solve for "k"



Hint:

Start by proving triangles are similar first



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

$$\frac{CE}{CA} = \frac{DC}{BC}$$

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

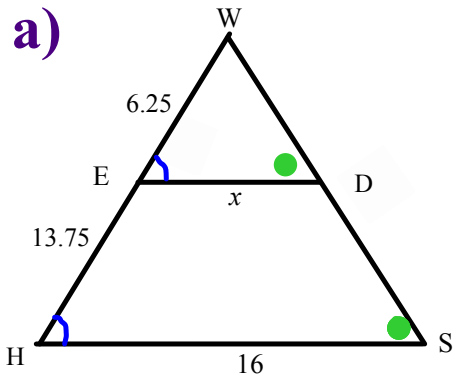
$$K = \frac{14(10)}{24}$$

$$K = 5.8\overline{3}$$

Try This !!

Solve for x . Remember to include a similarity statement

a)



$\angle W = \angle W$

$\angle E = \angle H$

$\angle D = \angle S$

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

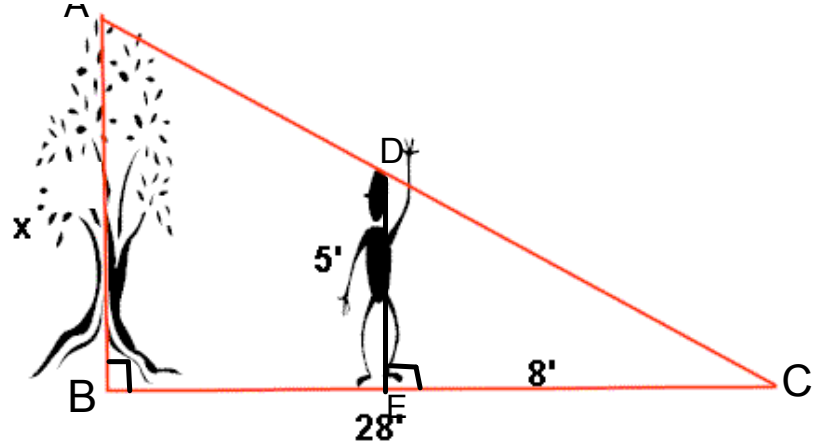
$$\frac{ED}{HS} = \frac{WE}{WH}$$

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

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

$$x = 5$$

7.



Choose:

- 8.5'
- 16'
- 17.5'
- 20'

Show your work

At a certain time of the day, the shadow of a 5' boy is 8' long. The shadow of a tree at this same time is 28' long. How tall is the tree?

Explanation

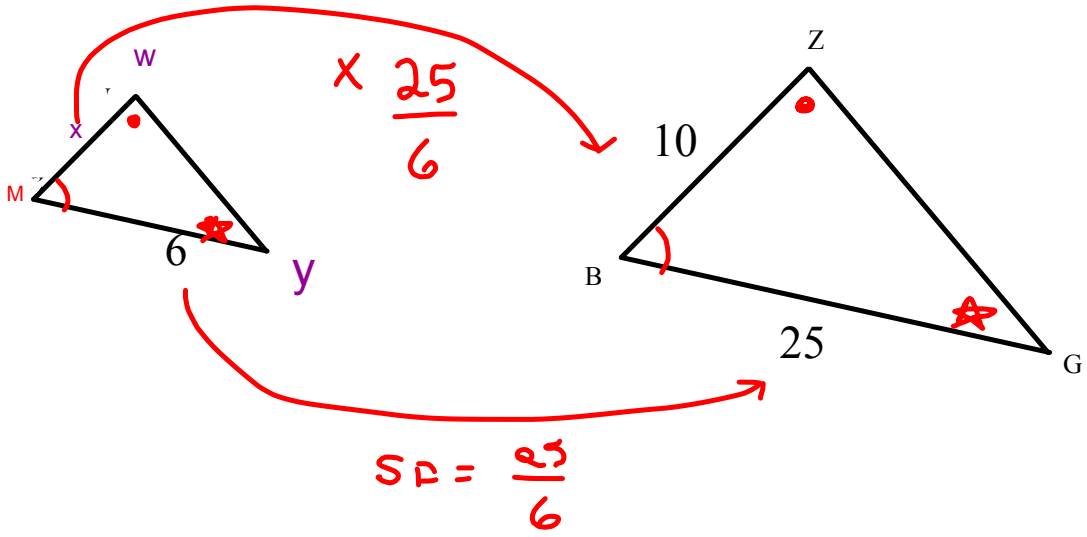
$$\frac{AB}{DE} = \frac{BC}{EC}$$

$$\frac{x}{5} = \frac{28}{8}$$

$$x = \frac{28(5)}{8}$$

$$x = 17.5$$

If $\triangle WMY \sim \triangle ZBG$, determine the value of x



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

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

$$x = 2.4$$

Homework

Tonight's

page 350 - 351

Last night

4cd, 5c, 6(abc), 7, 9, 10, 11,12,14