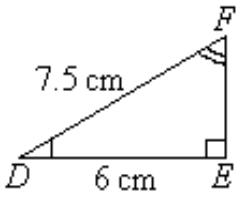
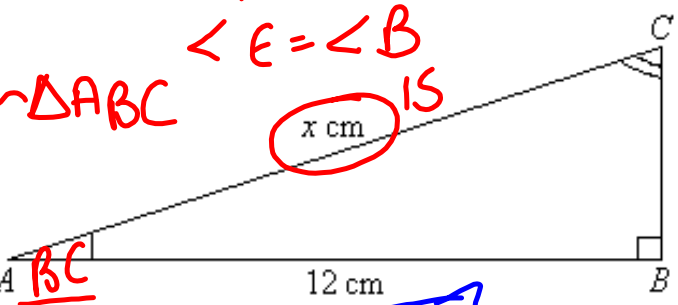
Warm-Up

1. **Are the triangles similar? How do you know?**

2. **Solve for x**





$\angle D = \angle A$
$\angle F = \angle C$
$\angle E = \angle B$

$\triangle DEF \sim \triangle ABC$

15

$\frac{CA}{FD} = \frac{AB}{DE} = \frac{BC}{EF}$

$\frac{CA}{7.5} = \frac{12}{6} = \frac{BC}{EF}$

$(7.5)\frac{CA}{7.5} = \frac{12}{6}(7.5)$

$CA = 15$

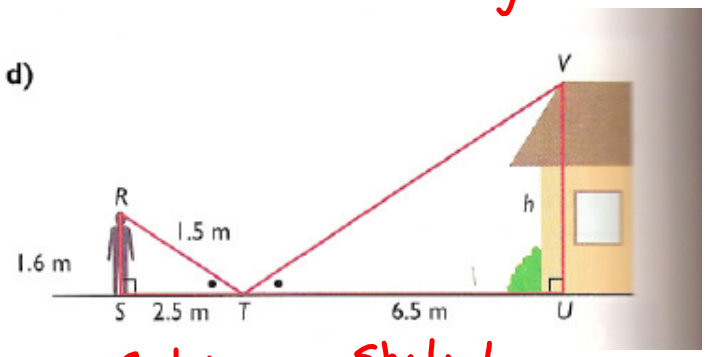
If DFE is the original what is the scale factor? Reduction or enlargement?

$S.F = \frac{12}{6}$

$S.F = 2$

- Find the height the house

d)



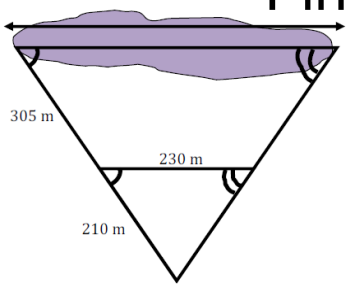
Shadow Shadow

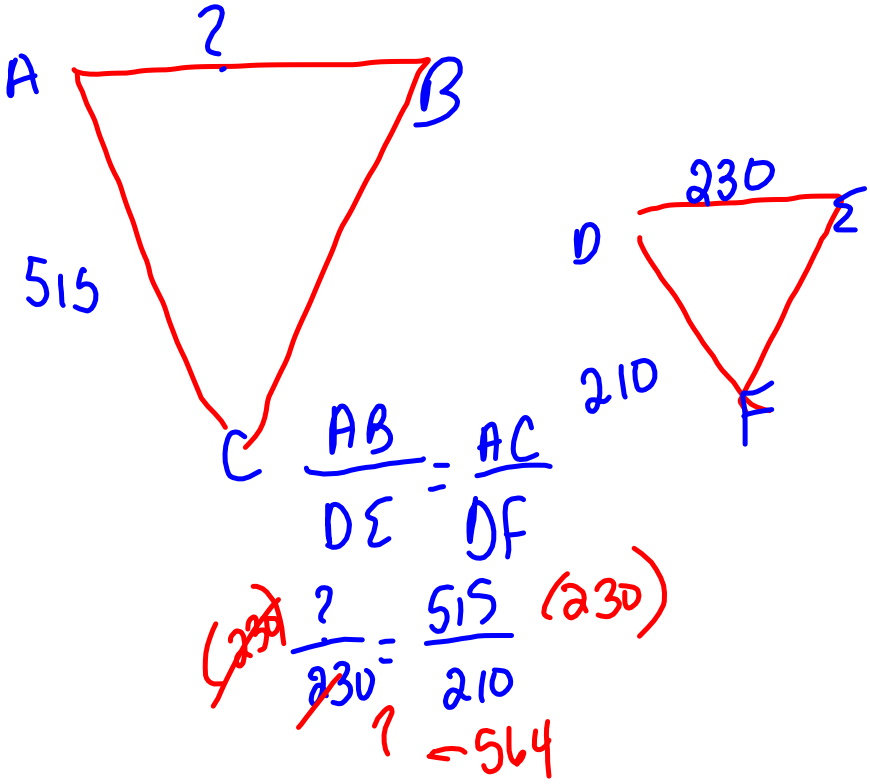
$$\frac{\text{height house}}{\text{height person}} = \frac{\text{shadow house}}{\text{shadow person}}$$

$$\frac{h}{1.6} = \frac{6.5}{2.5} \quad (1.6)$$

$$h = 4.16$$

Find the distance across the river.



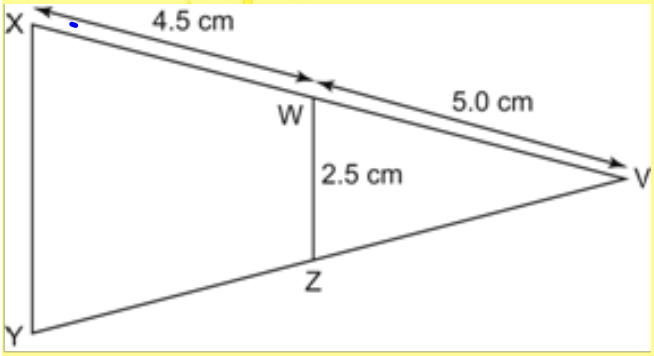


$$\frac{AB}{DE} = \frac{AC}{DF}$$

$$\frac{?}{230} = \frac{515}{210}$$

$$? = 564$$

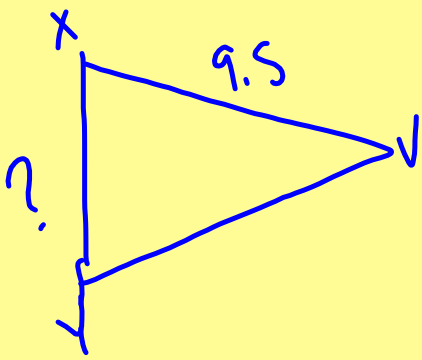
Find side XY

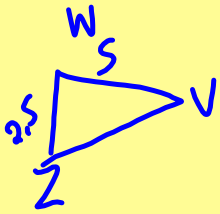


$\frac{XY}{WZ} = \frac{XV}{WV}$

$\frac{?}{2.5} = \frac{9.5}{5}$ (2.5)

$? = 4.75$





For the Test...

1 * Scale factor = $\frac{\text{reduction/enlargement}}{\text{original}}$

2 *New _____= scale factor x original

3 *To prove polygons similar the following must be the same:

A. ratio of corresponding sides are equal

B. corresponding angles are equal

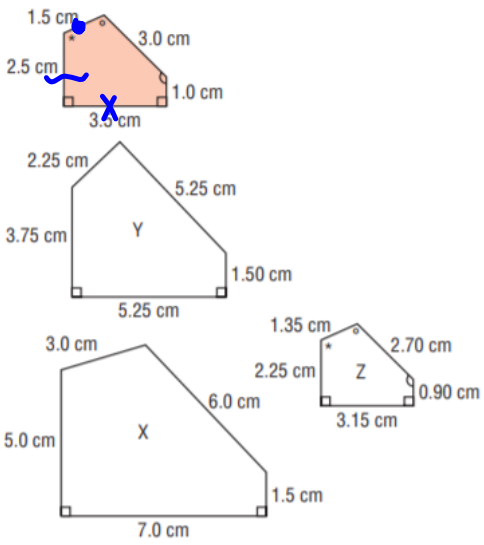
UNLESS A TRIANGLE ONLY NEED A OR B

40 min to complete the quiz...Review worksheet to practice and any questions covered in section 7.1-7.4

Practice for Test sections 7.1-7.4

Page 377 1,6,7,8,9,10,11

6. Which pentagon is similar to the red pentagon? Justify your answer.



compare 3 sides

red

y

$\frac{1.5}{2.25} =$

Extra

Pg 352 1, 2

Pg 380 1 [a, b], 2

Pg 465 # 13, 14, 15