Ch 4 Review

April 21, 2016 11:27 AM

- scale factor going from A to B

$$\text{scale factor} = \frac{\text{side length of B}}{\text{side length of A}}$$

B : A

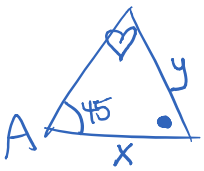
↑ new diagram ↑ orginial actual object

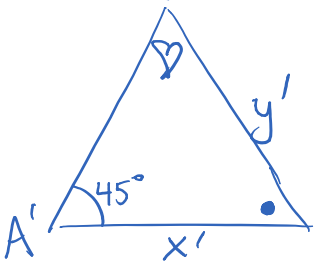
going from B to A

flip the fraction

$$\text{scale factor} = \frac{\text{side of A}}{\text{side of B}}$$

- corresponding angles are equal in similar shapes



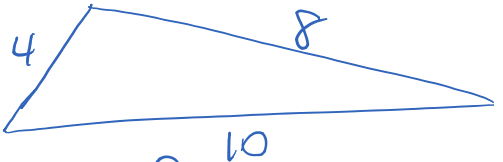


ratios of corresponding sides are equal and they equal the scale factor.

$$\frac{x}{x'} = \frac{y}{y'} \quad \text{or} \quad \frac{x'}{x} = \frac{y'}{y}$$

- must scale up or down each and every side

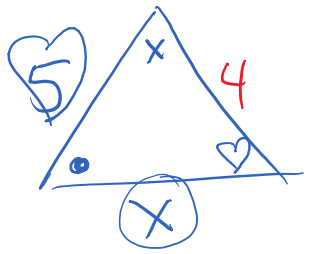
×2 =

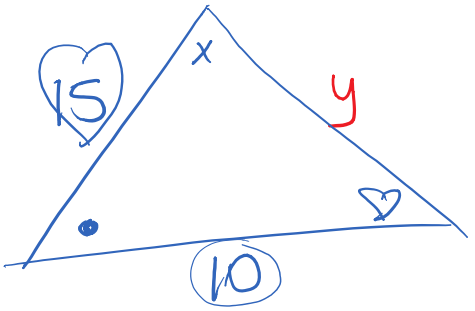


- use sides to find scale factor for similar shapes.

similar Shapes.

ex





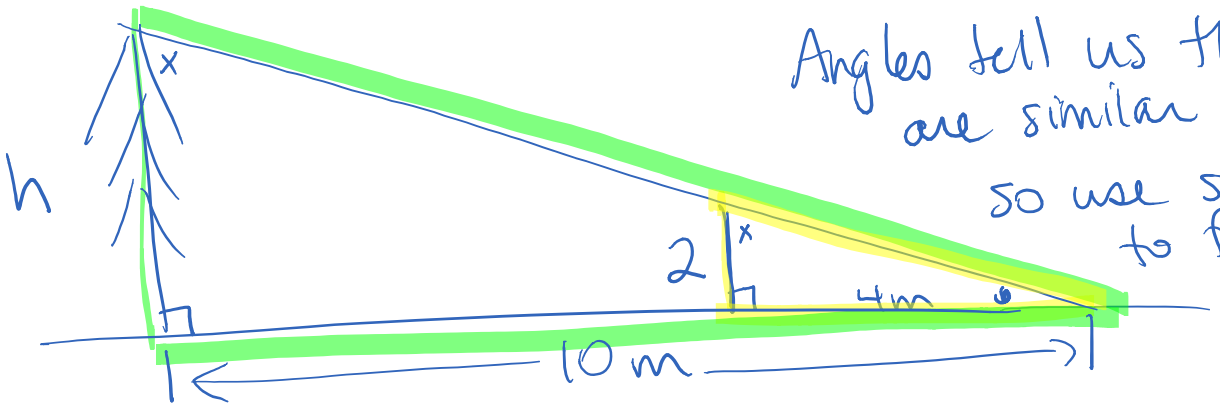
$$\frac{X}{10} = \frac{5}{15} \times 10$$

$$X = \frac{50}{15} = 3.\overline{3}$$

$$\frac{y}{4} = \frac{15}{5} \times 4$$

$$y = 12$$

ex



Angles tell us these are similar △s, so use sides to find h

$$\frac{h}{2} = \frac{10}{4} \times 2$$

$$h = \frac{20}{4} = 5\text{m}$$