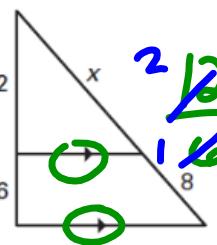


## Warmup

Name: \_\_\_\_\_

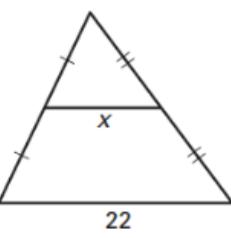
Find the value of x.

1. 

$$\frac{2}{1} = \frac{x}{8}$$

$$16 = 1x$$

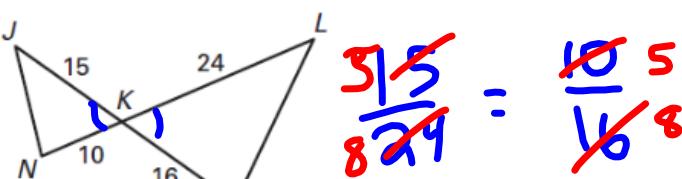
$$x = 16$$

2. 

$$\frac{2}{1} = \frac{x}{11}$$

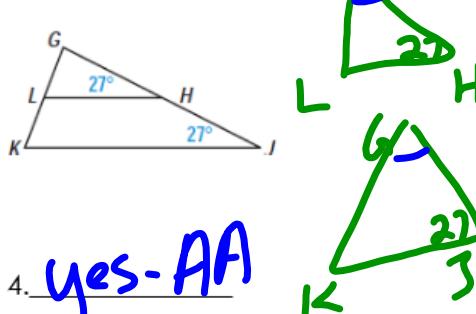
$$x = 11$$

Which postulate or theorem determines whether the triangles are similar? (AA, SSS, SAS, or none)

3. 

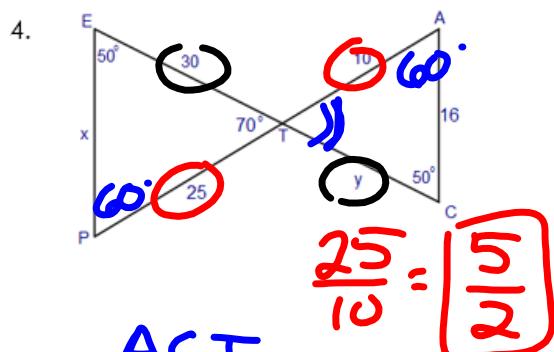
$$\frac{5}{8} = \frac{5}{8}$$

$$yes - SAS$$

4. 

$$yes - AA$$

Find the missing angles and set up proportions to find the missing side lengths for the similar triangles.



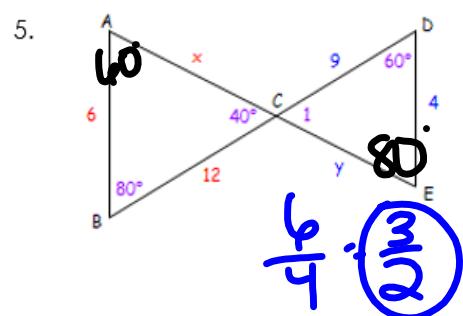
$$\Delta PET \sim \Delta ACT$$

$$x = 40$$

Proportion to find x:

$$\frac{5}{2} = \frac{x}{16}$$

$$m\angle P = 60^\circ \quad m\angle ATC = 70^\circ \quad m\angle A = 60^\circ$$



$$\Delta CAB \sim \Delta CDE$$

$$x = 13.5$$

Proportion to find x:

$$\frac{3}{2} = \frac{x}{9}$$

$$m\angle 1 = 40^\circ \quad m\angle A = 60^\circ \quad m\angle E = 80^\circ$$

$$\frac{3}{2} = \frac{12}{y}$$

$$y = 8$$

Proportion to find y: