

G3 : Extra Test Review

Solve for x. The triangles in each pair are similar.

1)

$$\frac{8x+10}{11} = \frac{48}{8}$$

$$8(8x+10) = 48(11)$$

$$64x+80 = 528$$

$$64x = \frac{448}{64}$$

$$x = 7$$

2)

$$\frac{99}{11} = \frac{72}{2x-2}$$

$$99(2x-2) = 11(72)$$

$$198x - 198 = 792$$

$$198x = 990$$

$$x = 5$$

State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.

3)

$\angle RSQ \cong \angle BSA$ (vertical angles)

$\angle R \cong \angle B$ (Given)

$\Delta SRQ \sim \Delta SBA$ (AA)

4)

$$\frac{8}{12} = .\bar{6}$$

$$\frac{15}{21} = .714$$

$$\frac{18}{28} = .643$$

not similar
fails SSS

$\Delta VWU \sim \Delta MNU$

State if the polygons are similar.

5)

$$\frac{15}{5} = 3$$

$$\frac{12.9}{4.3} = 3$$

$$\frac{24}{8} = 3$$

all corresponding $\angle s \cong$

Similar

6)

$$\frac{15}{10} = 1.5$$

$$\frac{12}{8} = 1.5$$

all corr. $\angle s \cong$

similar