

G3 C Level Test Review

Date _____ Period _____

The polygons in each pair are similar. Find the missing side length.

1)

$$\frac{x}{6} = \frac{12}{18}$$

$$18x = 72$$

$$\boxed{x = 4}$$

2)

$$\frac{4}{x} = \frac{24}{42}$$

$$24x = 168$$

$$\boxed{x = 7}$$

3)

$$\frac{7}{x} = \frac{28}{32}$$

$$28x = 224$$

$$\boxed{x = 8}$$

4)

$$\frac{21}{x} = \frac{35}{20}$$

$$35x = 420$$

$$\boxed{x = 12}$$

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

5)

$$\frac{2x}{6} = \frac{24}{9}$$

$$18x = 144$$

$$\boxed{x = 8}$$

6)

$$\frac{x}{18} = \frac{6}{12}$$

$$12x = 108$$

$$\boxed{x = 9}$$

Solve for x and y. The polygons in each pair are similar.

7)

$$\frac{x}{7} = \frac{10}{5}$$

$$5x = 70$$

$$\boxed{x = 14}$$

$$\frac{y}{8} = \frac{10}{5}$$

$$5y = 80$$

$$\boxed{y = 16}$$

8)

$$\frac{x}{3} = \frac{24}{12}$$

$$12x = 72$$

$$\boxed{x = 6}$$

$$\frac{y}{3} = \frac{32}{12}$$

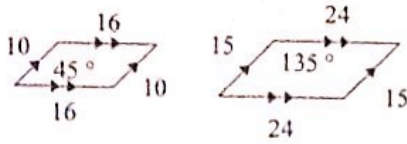
$$12y = 96$$

$$\boxed{y = 8}$$

-1-

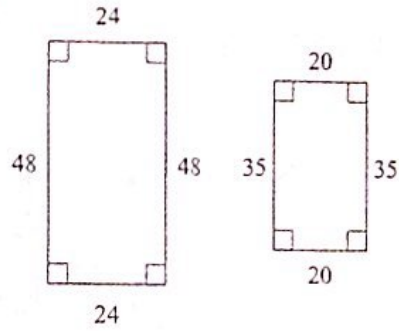
State if the polygons are similar.

9)



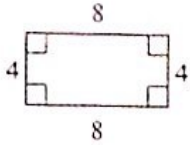
Similar

10)

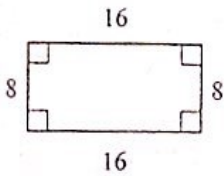


not similar

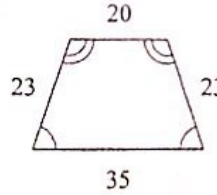
11)



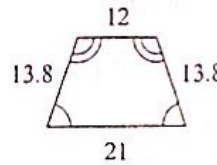
Similar



12)

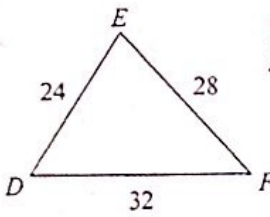


similar



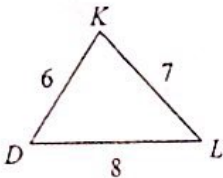
State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.

13)



$$\frac{32}{8} = 4$$

$$\frac{28}{7} = 4$$

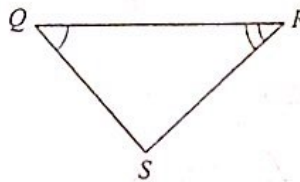


$$\frac{24}{6} = 4$$

Similar by SSS~

$\triangle DEF \sim \triangle DKL$

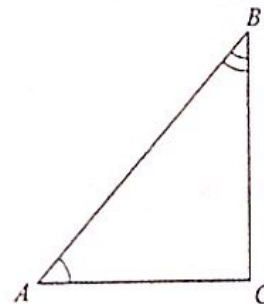
14)



$$\angle R \cong \angle B$$

$$\angle Q \cong \angle A$$

Similar by AA~



$\triangle ABC \sim \triangle QRS$