1. Are the following pairs of triangles similar? If they are, then name their similarity criteria. (SSS~, SAS~, AA~)
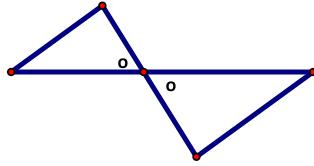
a) Yes / No _____
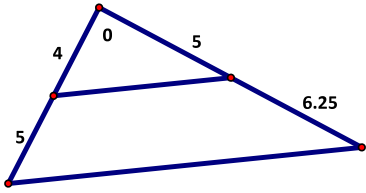
b) Yes / No _____
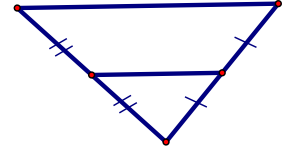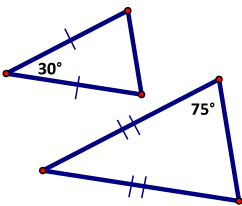
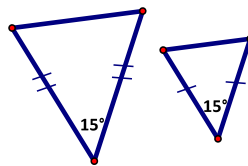c) Yes / No _____

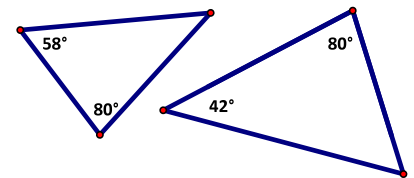d) Yes / No _____
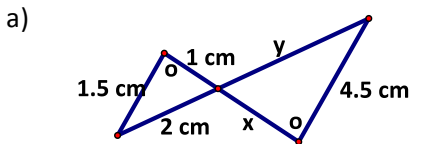
e) Yes / No _____

f) Yes / No _____

2. Given that ∆NHG ~ ∆JKL. Complete the following.

a) ∠G ≅ ∠ _____

b) $\dfrac{KL}{HG} = \dfrac{JK}{\boxed{}}$ _____

c) ∠J ≅ ∠ _____

d) $\dfrac{\boxed{}}{NG} = \dfrac{KL}{HG}$ _____

3. Solve for the missing information, given that the two triangles in each question are SIMILAR. (2 decimals)

a)

1 cm
1.5 cm
2 cm
y
x
4.5 cm

b)

12 cm
y
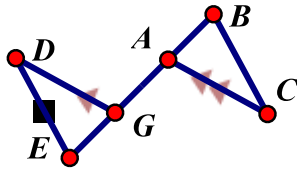7 cm
10 cm
x
14 cm

c)

4 cm
y
4 cm
x
3 cm   6 cm
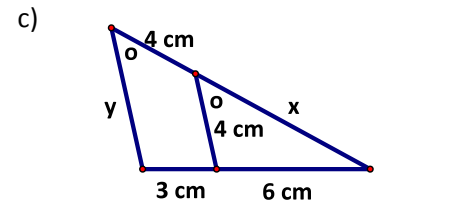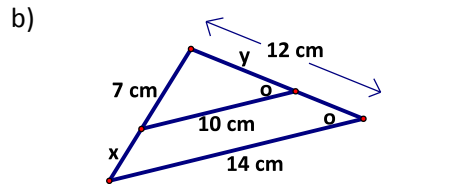
x = _____ y = _____

x = _____ y = _____

x = _____ y = _____

4. The perimeter of a rectangle is 504 cm. If the length and the width are in a ratio of 7:2. Find the length and width.

5. a) GIVEN:

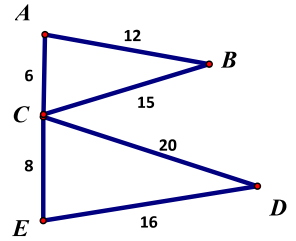$\overline{DE} \| \overline{CB}$ & $\overline{DG} \| \overline{CA}$

PROVE:

ΔEDG ~ ΔBCA

STATEMENT	REASON

b) GIVEN: Diagram as Marked

PROVE:

∠B ≅ ∠D

STATEMENT	REASON

6. Complete the proportions.

a) $\dfrac{AD}{AE} = \dfrac{DC}{\boxed{}}$

b) $\dfrac{AC}{AD} = \dfrac{AG}{\boxed{}}$

c) $\dfrac{EB}{FG} = \dfrac{\boxed{}}{AG}$
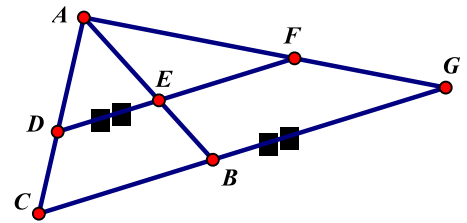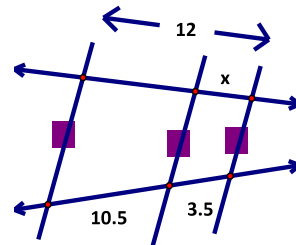

7. Find the values for the missing variables.
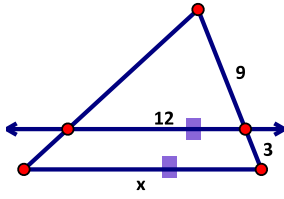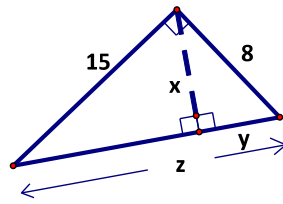
a)
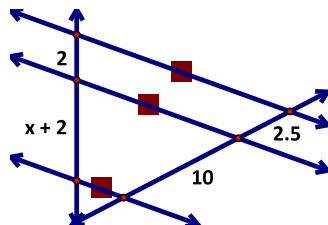
b)

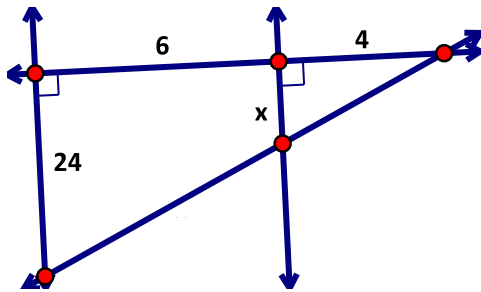9. Find the missing values. (Leave your answers in simplified, radical form if necessary.)

a)

b)

c)

d)