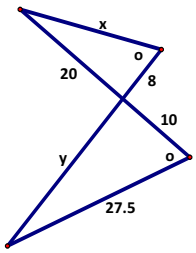
Math III ***Name_____Pd_____Date_____***

Solving Similar Triangles G.SRT.2

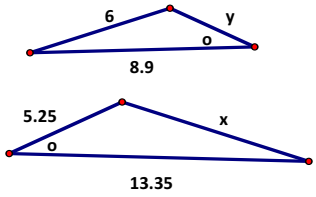
1. Solve for the missing information, given that the two triangles in each question are SIMILAR.

a)



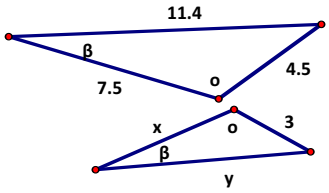
x = _____ y = _____

b)



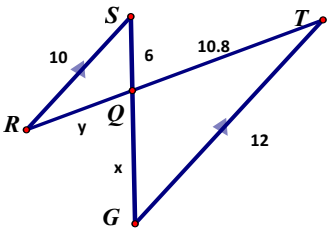
x = _____ y = _____

c)



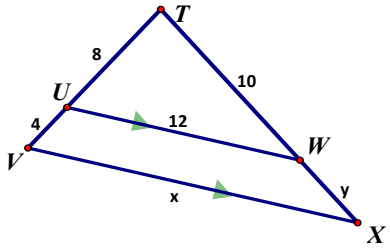
x = _____ y = _____

d)



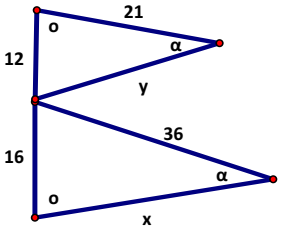
x = _____ y = _____

e)



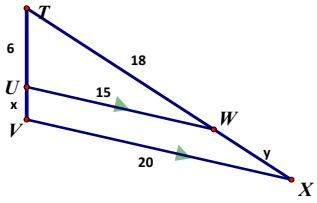
x = _____ y = _____

f)



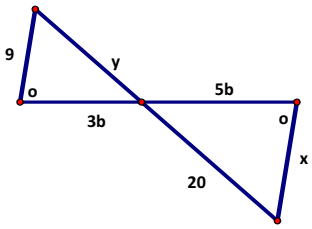
x = _____ y = _____

g)



x = _____ y = _____

h)



x = _____ y = _____

i)

ΔABC has sides of 5,6,7

ΔABC ~ ΔDEF

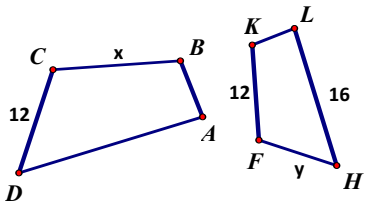
ΔDEF has sides 9, x, y

x = _____ y = _____

2. If the three sides of a triangle are in ratio of 3:5:7 and the perimeter of the triangle is 12 cm. What is the length of the longest side?

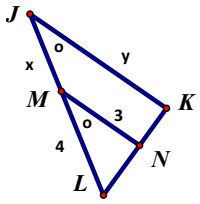
3. Use the scale factor to determine the missing values.

a) CBAD : FKLH is 3:2



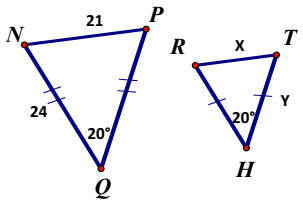
x = _____ y = _____

b) ΔLMN : ΔLJK is 1:2



x = _____ y = _____

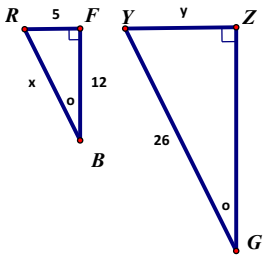
c) ΔQNP : ΔHRT is 2:1



x = _____ y = _____

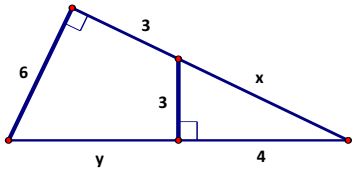
4. Use the Pythagorean Theorem to help you on these. Solving for the missing values.

a)



x = _____ y = _____

b)



x = _____ y = _____

c)

Right ΔABC has sides of
AB = 8, BC = 15, & AC = x
where AC is the hypotenuse

ΔABC ~ ΔDEF

Right ΔDEF has sides
DE = z, EF = y, & DF = 51

x = _____ y = _____

z = _____