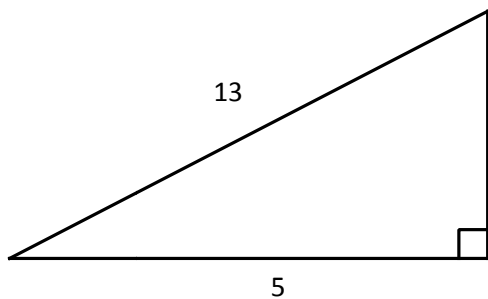# Homework #2
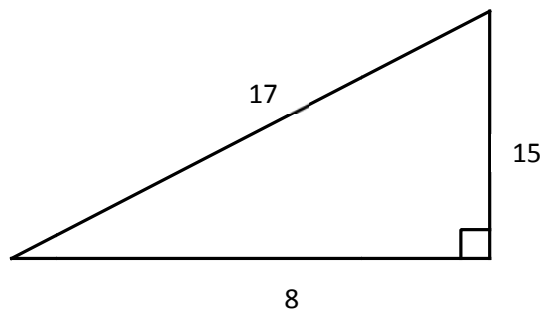
Problem 1. (Rule of Pythagoras) Find the missing side of the triangle:
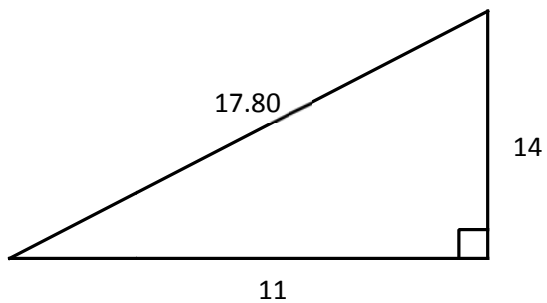
a)

13

5

b)

17

15

8

c)

17.80
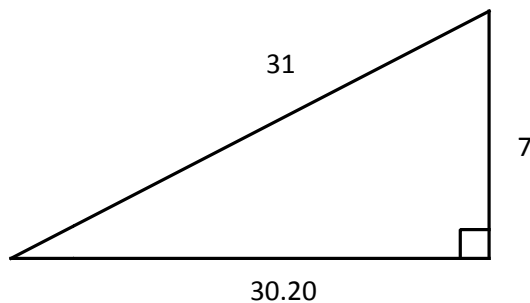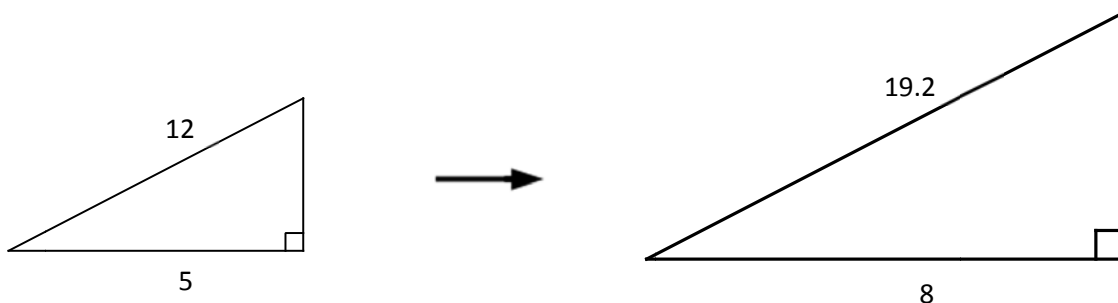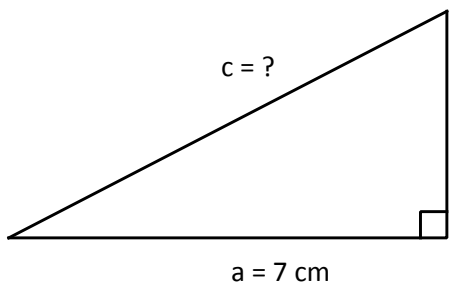
14

11

d)

31

7

30.20

Problem 2. (Ratios) If the two triangles are **similar** (meaning proportional), find the unknown side.

12

5

⟶

19.2

8

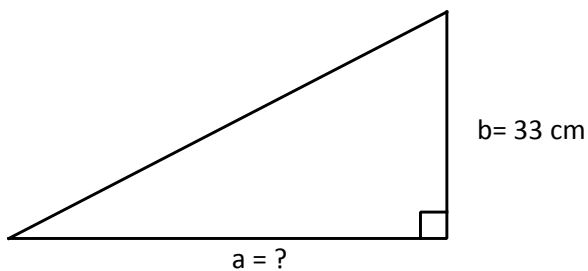Problem 3. (Ratios) Find the unknown side given the appropriate ratio:

a)

c = ?

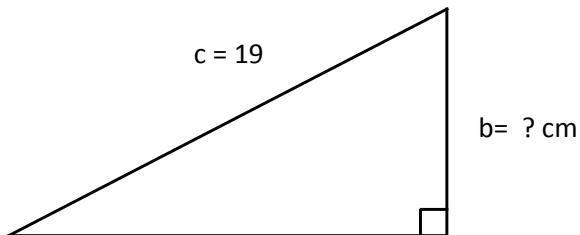a = 7 cm

Ratio of a to c is 1 : 2.5
Working:

c = 17.5 cm

b)

b= 33 cm

a = ?

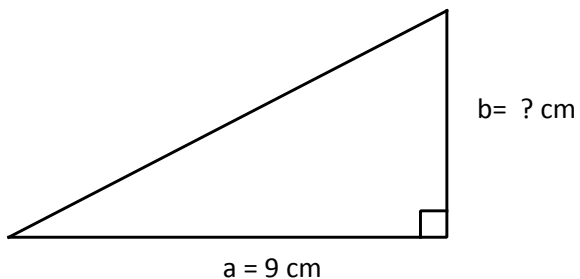Ratio of b to a is 3 : 1
Working:

a = 11 cm

c)

c = 19

b= ? cm

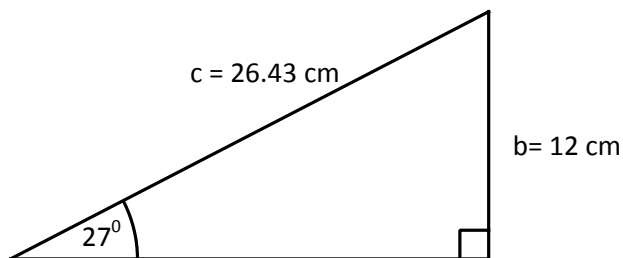Ratio of b to c is 1 : 3.7
Working:

b = 5.14 cm

d)

b= ? cm

a = 9 cm

Ratio of a to b is 1.3 : 2.1
Working:
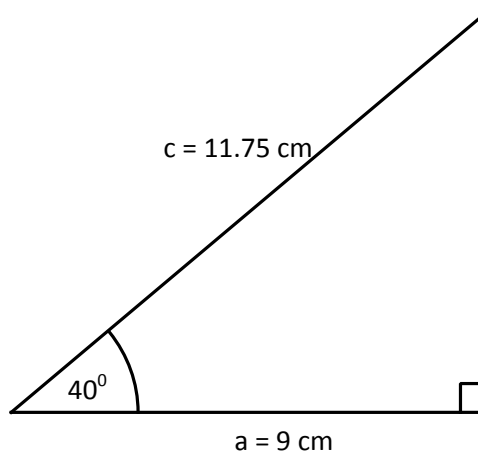
b = 14.54 cm

Problem 4. (Sin, Cos, Tan functions) Find the unknown side.

a)

c = 26.43 cm

b= 12 cm
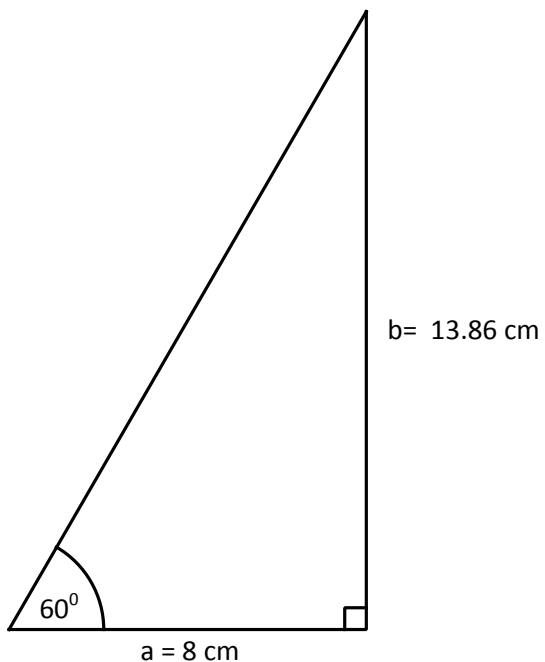
27^0

b)

c = 11.75 cm

40^0

a = 9 cm

c)

b= 13.86 cm

60^0

a = 8 cm

d)

c = 17 cm

b= 9.75 cm

35^0