

1. A right-angled triangle has sides of length 3 cm, 4 cm and 5 cm.

In ascending order, what are the lengths of the sides of similar triangles with the following areas: (answers to 2 d.p.)

- (a) 24 cm^2 (b) 65 cm^2 (c) 112 cm^2 (d) 18 cm^2 (e) 39 cm^2

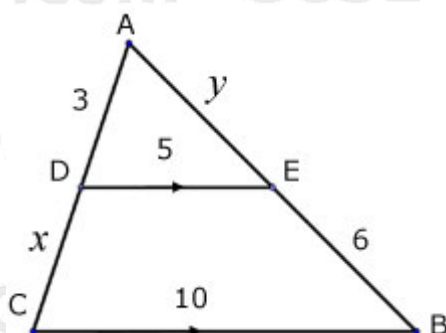
2. A regular cylinder of height 25 cm has a volume of 450 cm^3 .

(a) what is the volume of a similar cylinder of twice the height ?

(b) what is the height of another similar cylinder with twice the original volume ?

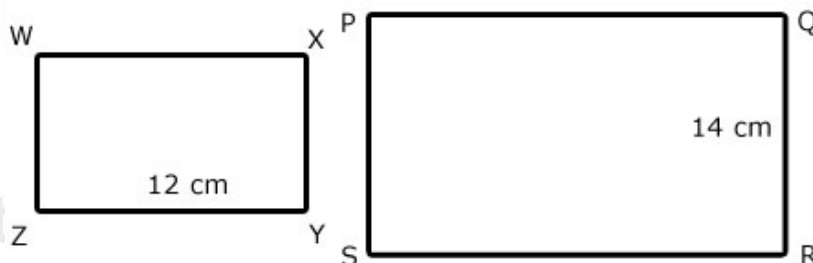
(answers to 2 d.p.)

3. Find the lengths x and y in triangle ABC. (answers to 2 d.p.)



4. The two rectangles WXYZ and PQRS are similar.

Find the lengths XY and SR if the ratio of the area of the smaller rectangle to the larger is 1:4



1. (a) 6, 8, 10
(b) 9.87, 13.17, 16.46
(c) 12.96, 17.28, 21.60
(d) 5.20, 6.93, 8.66
(e) 7.65, 10.20, 12.75+

2. (a) $3,600 \text{ cm}^3$
(b) 31.50 cm^3

3. $x = 3, y = 6$

4. $XY = 7 \text{ cm}, SR = 24 \text{ cm}$