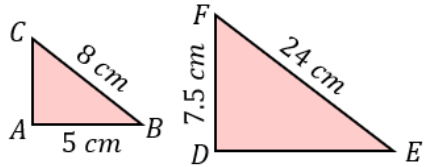


Similar Shapes Revision

(a)

Triangles ABC and DEF are similar. Calculate the lengths of DE and AC.

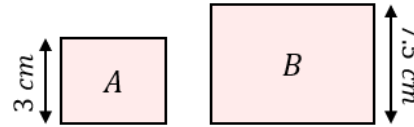


$$AC = 2.5 \text{ cm}$$

$$DE = 15 \text{ cm}$$

(b)

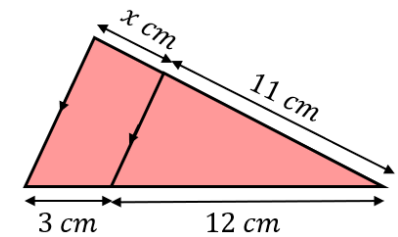
Rectangles A and B are mathematically similar. The area of A is 40 cm^2 . Work out the area of rectangle B.



$$250 \text{ cm}^2$$

(c)

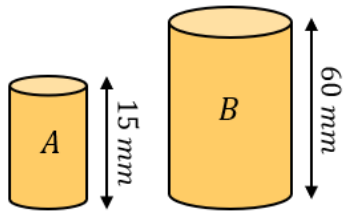
Find the missing length x .



$$x = 2.75 \text{ cm}$$

(d)

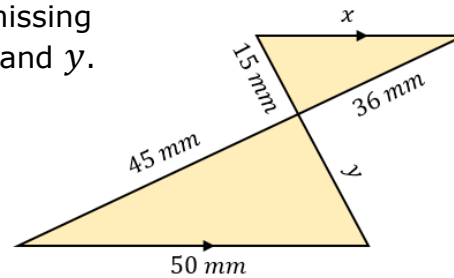
Cylinders A and B are similar. The volume of cylinder B is 2080 cm^3 . Find the volume of cylinder A.



$$32.5 \text{ cm}^3$$

(e)

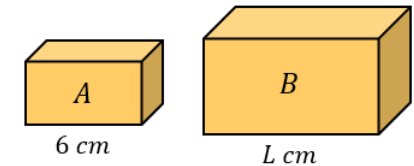
Find the missing lengths x and y .



$$x = 40 \text{ mm}, y = 18.75 \text{ mm}$$

(f)

Cuboids A and B are similar. A has a volume of 28 cm^3 and B has a volume of 437.5 cm^3 . Find the length L .



$$15 \text{ cm}$$

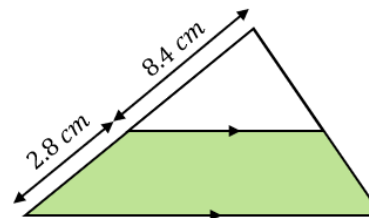
(g)

Cones A and B are mathematically similar. Cone A has a volume of 857.5 cm^3 and a surface area of 73.5 cm^2 . Cone B has a volume of 160 cm^3 . Find its surface area.

$$24 \text{ cm}^2$$

(h)

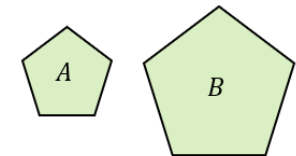
The area of the white triangle is 18 cm^2 . Find the area of the shaded region.



$$14 \text{ cm}^2$$

(i)

Pentagons A and B are similar. The scale factor of their lengths is x . The area of A is 12 cm^2 . If the area of B is $(16x + 3) \text{ cm}^2$, find the value of x .



$$1.5 \text{ cm}$$