



Name: _____



Find the value of x in these **similar** shapes:

a) Area = 15cm^2 3cm Area = $x\text{ cm}^2$ 6cm
 $x = 120$

b) Area = 12cm^2 6cm Area = $x\text{ cm}^2$ 12cm
 $x = 96$

c) Area = 48cm^2 12cm Area = $x\text{ cm}^2$ 3cm
 $x = 160$

d) Area = $x\text{ cm}^2$ 8cm Area = 96cm^2 16cm
 $x = 12$

e) Area = 108cm^2 12cm Area = $x\text{ cm}^2$ 4cm
 $x = 12$

f) Area = 540cm^2 36cm Area = $x\text{ cm}^2$ 12cm
 $x = 60$

g) Area = 10 m^2 4m Area = $x\text{ m}^2$ 6m
 $x = 22.5$

h) Area = 225cm^2 18cm Area = $x\text{ cm}^2$ 12m
 $x = 100$

i) Area = 84mm^2 8mm Area = $x\text{ mm}^2$ 4mm
 $x = 21$

j) Area = 48cm^2 6cm Area = $x\text{ cm}^2$ 60cm
 $x = 4800$

k) Area = $x\text{ cm}^2$ 11mm Area = 108mm^2 33mm
 $x = 12$

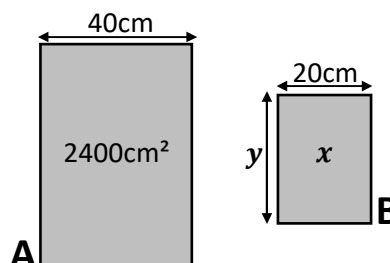
l) Area = 5cm^2 6cm Area = 20cm^2 x cm
 $x = 12$

Exam question:

A and B are similar shapes.
Calculate the values of x and y

$x = 600$

$y = 30$





Name: _____



Find the value of x in these **similar** shapes:

a) Vol = 15cm^3 3cm
 $x = 120$

6cm Vol = $x\text{ cm}^3$

b) Vol = 12cm^3 4cm
 $x = 96$

8cm Vol = $x\text{ cm}^3$

c) Vol = 20 cm^3 5cm
 $x = 160$

Vol = $x\text{ cm}^3$ 10cm

d) Vol = 96cm^3 8cm
 $x = 12$

Vol = $x\text{ cm}^3$ 4 cm

e) Vol = $x\text{ cm}^3$ 8cm
 $x = 160$

4cm Vol = 20cm^3

f) Vol = $x\text{ cm}^3$ 3cm
 $x = 78.75$

6cm Vol = 630cm^3

g) Vol = 270mm^3 12mm
 $x = 10$

Vol = $x\text{ mm}^3$ 4mm

h) Vol = 14cm^3 5cm
 $x = 378$

Vol = $x\text{ cm}^3$ 15cm

i) Vol = $x\text{ m}^3$ 16m
 $x = 640$

Vol = 10m^3 4m

j) 5cm Vol = 750cm^3
 $x = 6$

1cm Vol = $x\text{ cm}^3$

k) Vol = $x\text{ cm}^3$ Surface area = 4cm^2
 $x = 90$

Vol = 720 cm^3 Surface area = 16 cm^2

l) Vol = 15 cm^3 Surface area = 4 cm^2
 $x = 405$

Vol = $x\text{ cm}^3$ Surface area = 36 cm^2

Exam question:

A and B are **similar** shapes.
The volume of A is 576cm^3 .
The Volume of B is 9cm^3 .
Calculate the value of x

$x = 2$

