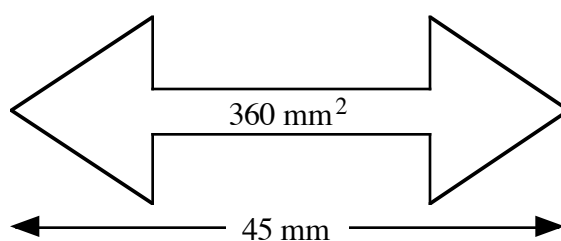
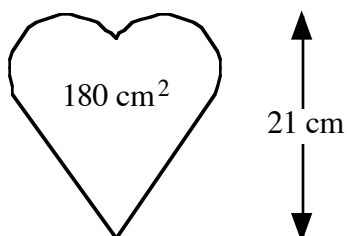
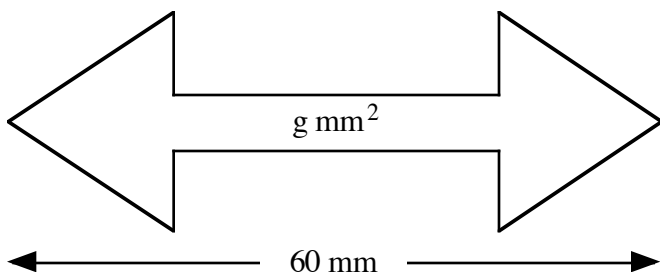
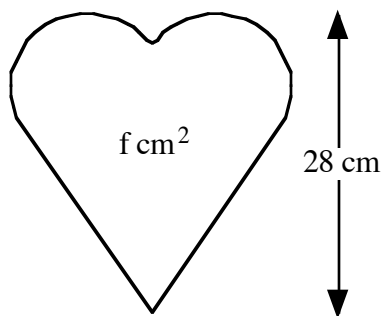
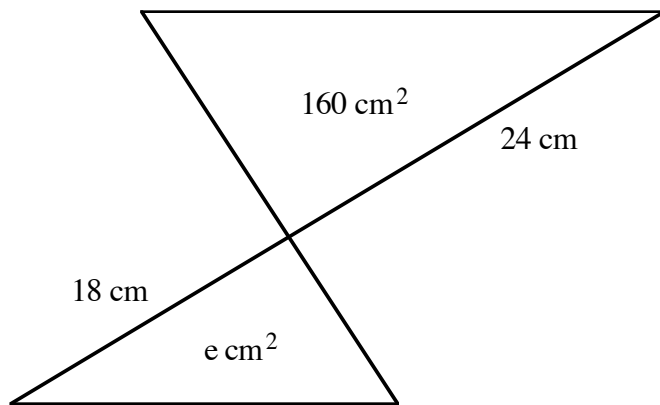
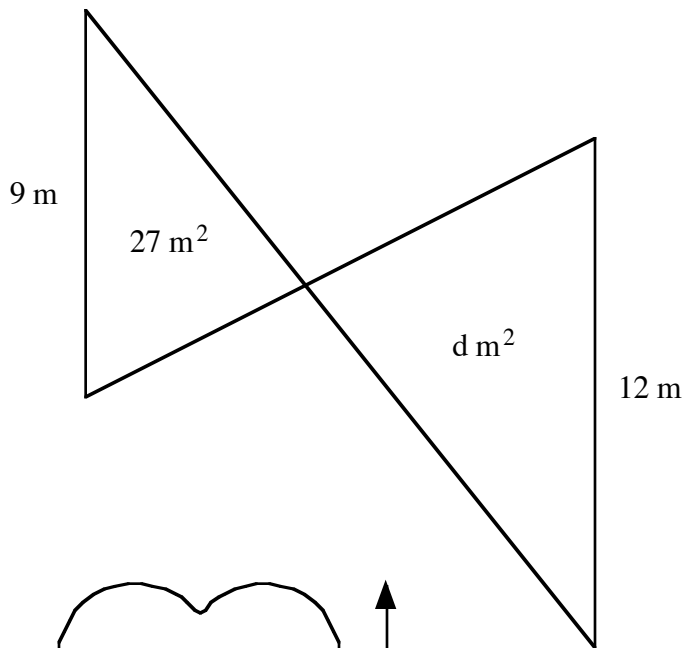
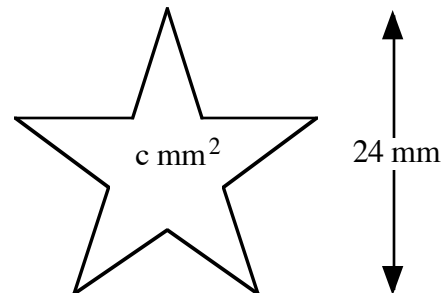
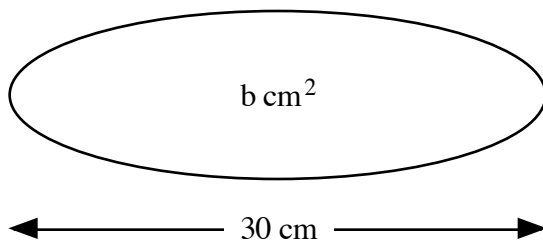
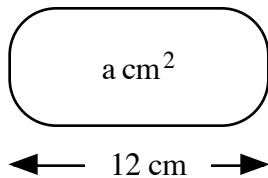
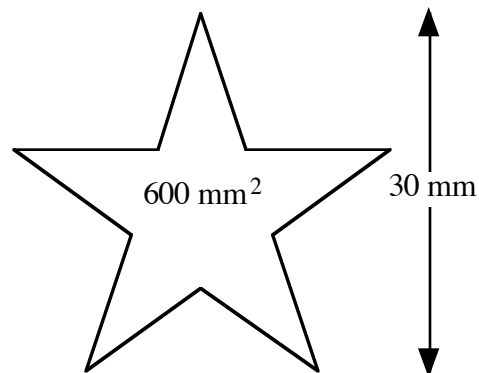
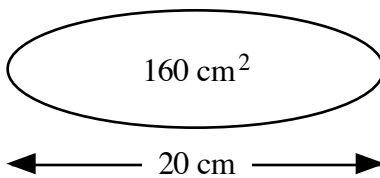
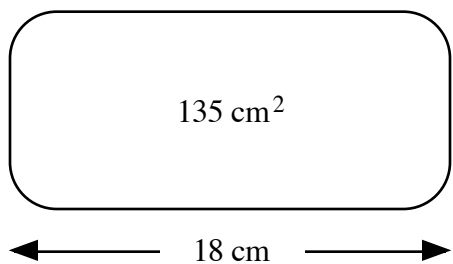
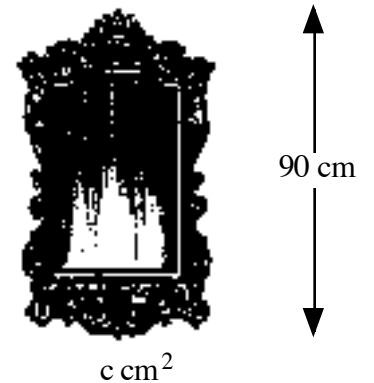
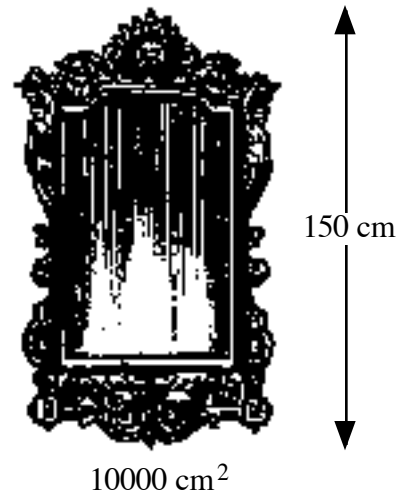
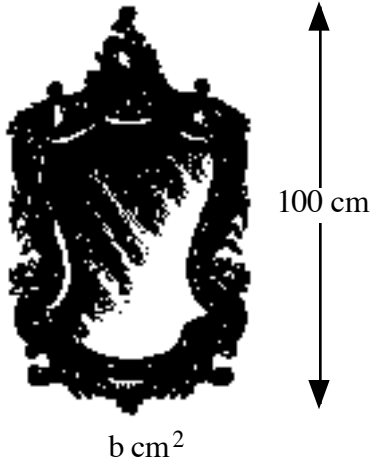
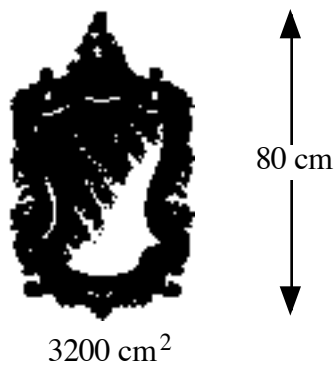
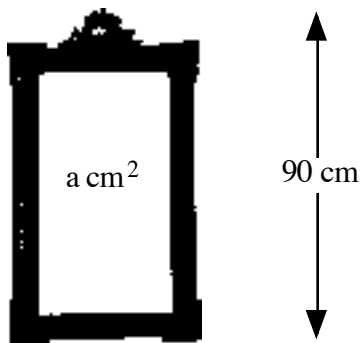
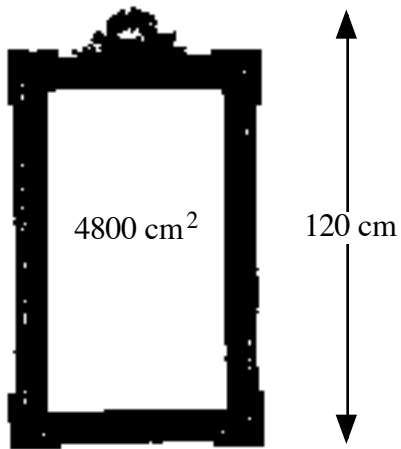


Similar Shapes: Area

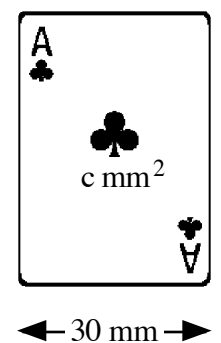
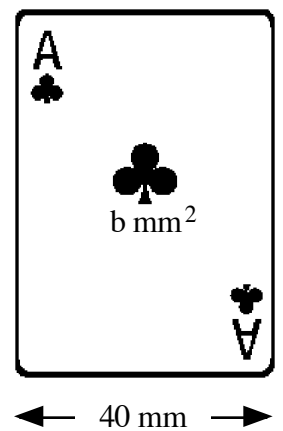
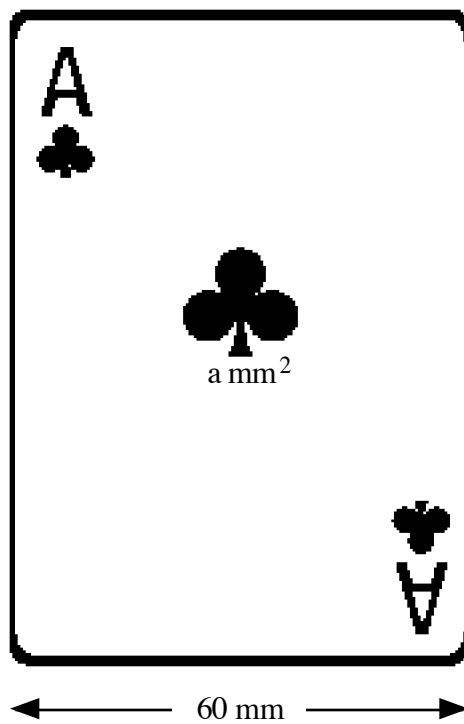
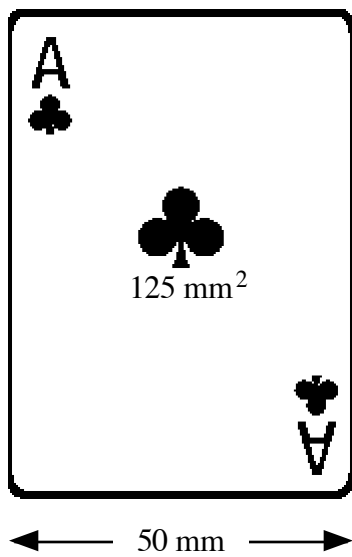
1. In each of the following the pairs of shapes are similar. Find the unknown area.



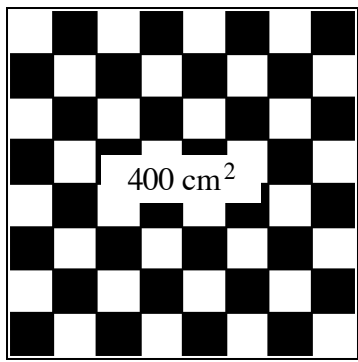
2. In each of the following pairs of mirrors are similar shapes.
Find the unknown area in each case.



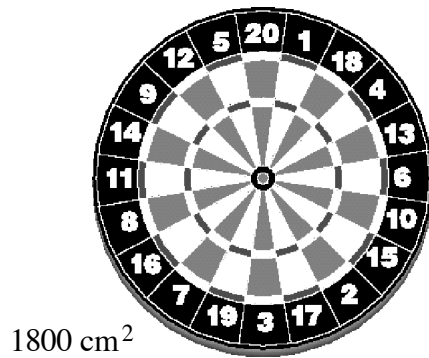
3. In each of the following the cards are similar. The area of the club at the centre is given.
Find the area of the club at the centre of each of the other cards.



4. In each of the following the pairs or triplets of shapes are similar. Find the unknown areas.

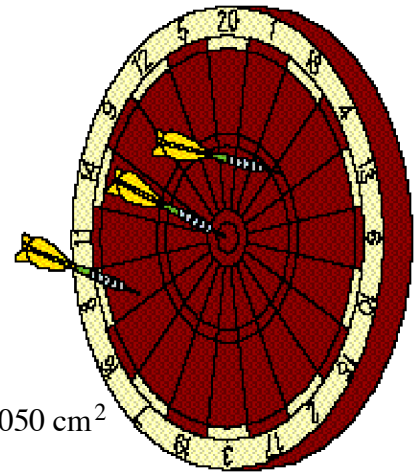


20 cm



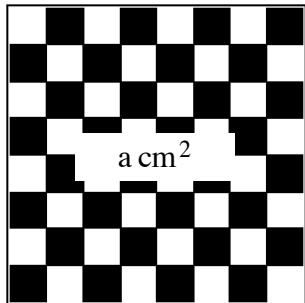
1800 cm²

48 cm

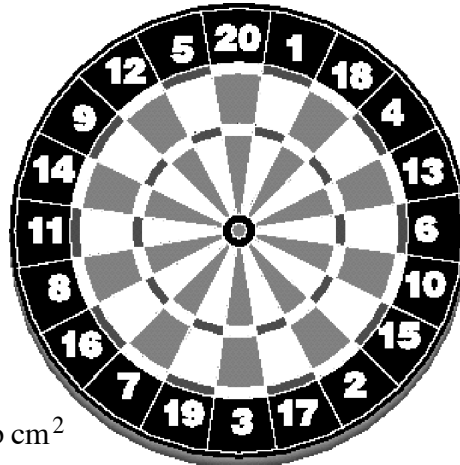


4050 cm²

72 cm

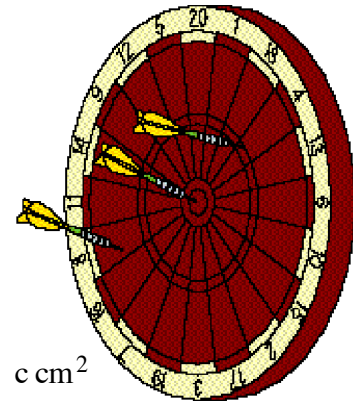


18 cm



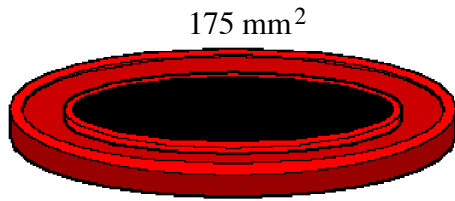
b cm²

56 cm



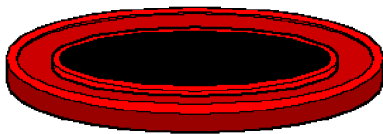
c cm²

48 cm



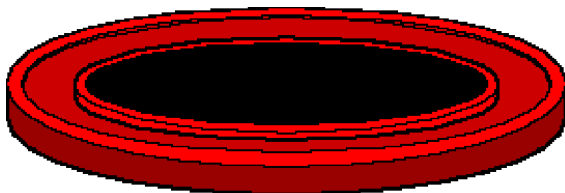
175 mm²

15 mm



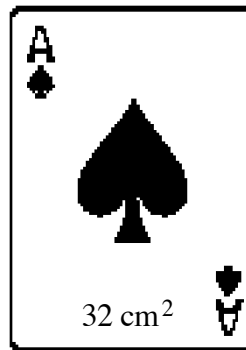
d mm²

12 mm



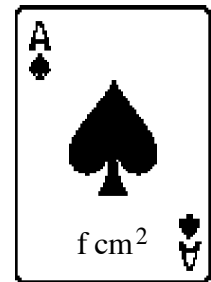
e mm²

18 mm



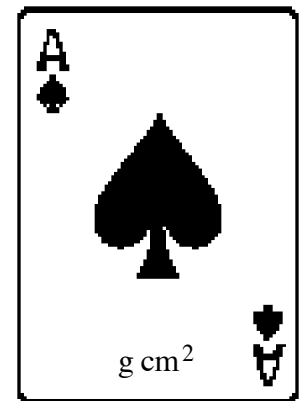
32 cm²

8 cm



f cm²

6 cm

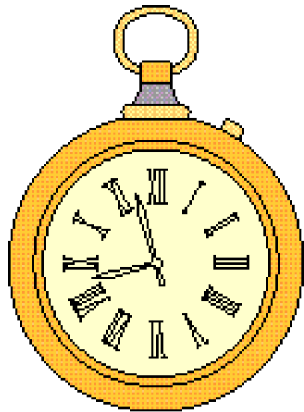


g cm²

10 cm

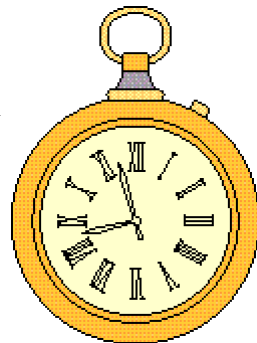
5. The pairs of watches are similar. The diameter of each watch face is given. The faces are to be coated with gold paint. The cost depends on the area of the face. The cost of coating one of the watch faces is given.

In each case, find the cost of coating the other watch face.



£ 6.40

8 cm



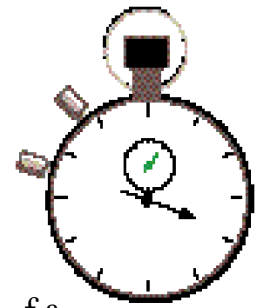
£ c

6 cm



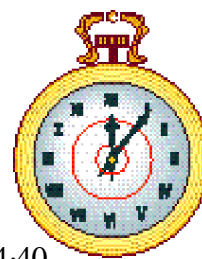
£ 6.25

5 cm



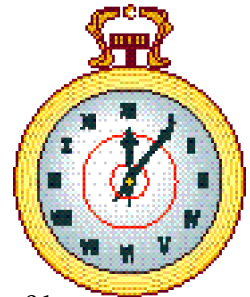
£ a

6 cm



£ 4.40

4 cm

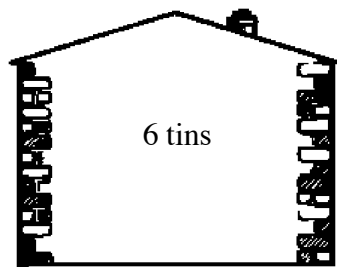


£ b

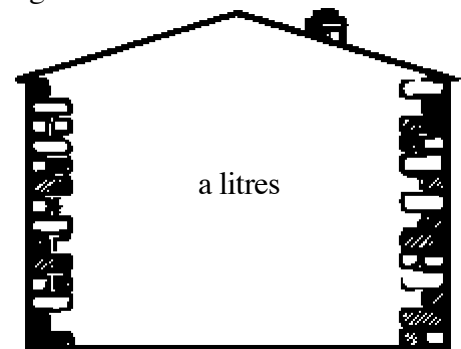
6 cm

6. The end faces of buildings are shown. In each of the pairs the end faces are similar. The number of **6 litre** tins of paint required to paint one of the end faces is given.

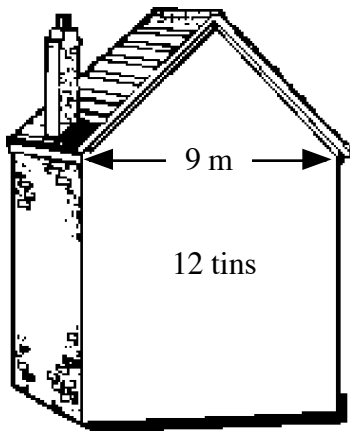
Find the number of **litres** of paint required to paint the other end face.



9 m

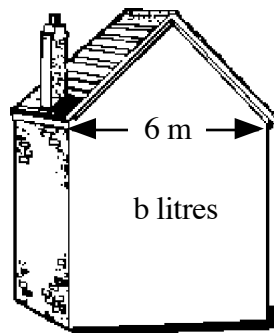


12 m



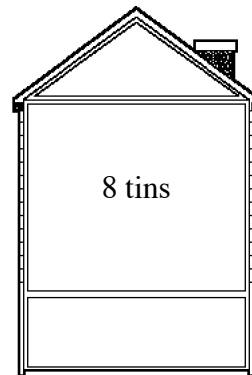
9 m

12 tins



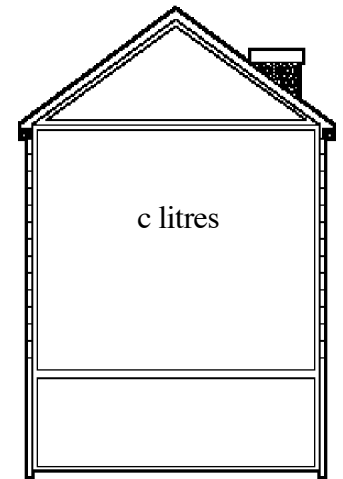
6 m

b litres



8 tins

4 m



c litres

6 m

Answers

1. a = 60 b = 360 c = 384 d = 48 e = 90 f = 320 g = 640
 2. a = 2700 b = 5000 c = 3600 3. a = 180 b = 80 c = 45
 4. a = 324 b = 2450 c = 1800 d = 112 e = 252 f = 18 g = 50
 5. a = 9 b = 9.90 c = 3.60 6. a = 64 b = 32 c = 108