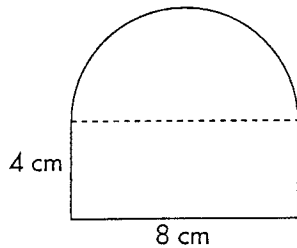
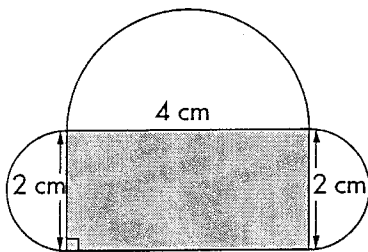


Do these sums. Show all your working clearly.

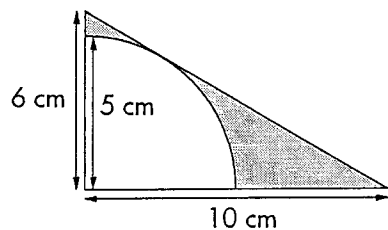
- (1) The figure below is made up of a semicircle and a rectangle. Find the perimeter of the figure. (Take $\pi = \frac{22}{7}$.)



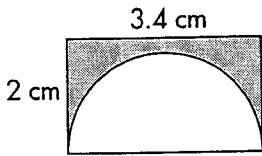
- (2) The figure below is made up of three semicircles and a rectangle. Find the total area of the **unshaded** parts. (Take $\pi = 3.14$.)



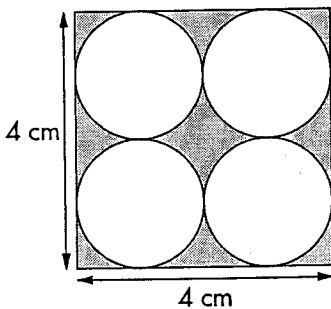
- (3) The figure below shows a quarter circle within a right-angled triangle. Find the total area of the shaded parts. (Take $\pi = \frac{22}{7}$.)



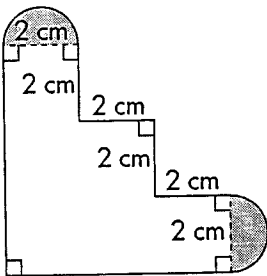
- (4) The figure below shows a semicircle within a rectangle. Find the area of the shaded part. Give your answer correct to 1 decimal place. (Take $\pi = 3.14$.)



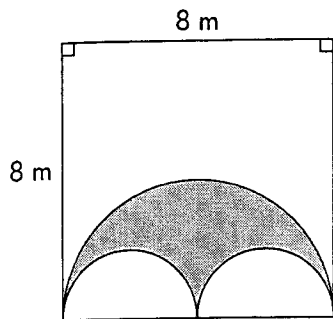
- (5) The figure below shows 4 circles within a square. Find the total area of the shaded parts. (Take $\pi = 3.14$.)



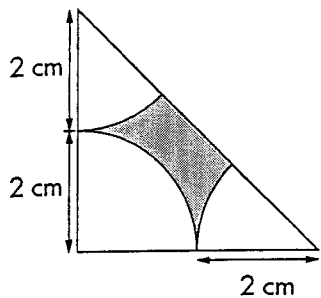
- (6) In the figure below, the shaded parts are semicircles. Find the perimeter of this figure. (Take $\pi = 3.14$.)



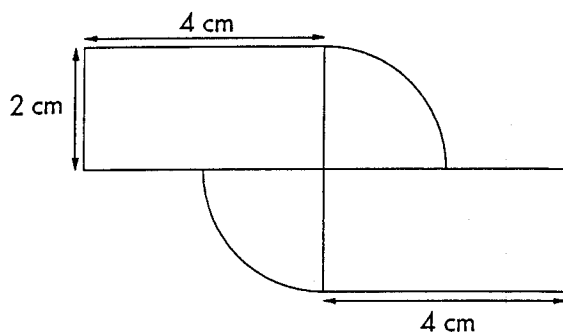
- (7) The figure below shows three semicircles within a square. Find the area of the shaded part. (Take $\pi = 3.14$.)



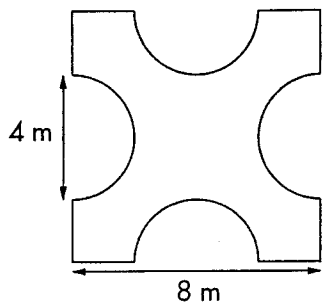
- (8) The figure below shows a right-angled triangle, a quarter circle and 2 half-quarter circles. Find the area of the shaded part. (Take $\pi = \frac{22}{7}$.)



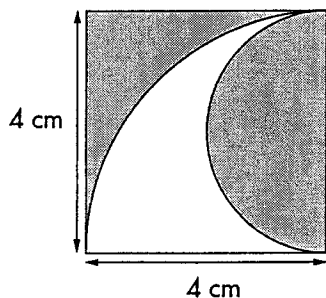
- (9) The following figure is made up of 2 rectangles and 2 quarter circles. Find its area. (Take $\pi = 3.14$.)



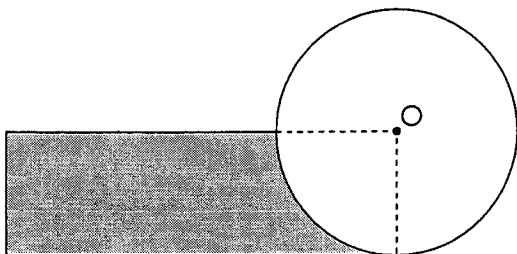
- (10) The figure below shows four semicircles cut out from a square. Find the perimeter of the figure. (Take $\pi = 3.14$.)



- (11) The figure below shows a quarter circle and a semicircle within a square. Find the perimeter of the unshaded part. (Take $\pi = \frac{22}{7}$.)



- (12) The figure below shows a rectangle and a circle. The circumference of the circle is 31.4 cm. The area of the rectangle is the same as that of the circle. Find the area of the shaded part. (Take $\pi = 3.14$.)



Exercise 12

- (1) \$216 (2) 1200 (3) \$90 (4) 2000
 (5) Eng: 84, Maths: 81 (6) $81\frac{3}{5}$ kg
 (7) 8500 kg (8) \$18 200

Exercise 13

- A (1) 72 km/h (2) 195 km (3) 6 h
 B (1) 82 km (2) 850 km/h (3) 9.75 km
 (4) 1.45 p.m. (5) 152.5 km (6) 60 km
 (7) (a) Car A (b) 7 km/h
 (8) $68\frac{1}{5}$ km/h (9) 3 h (10) $7\frac{1}{2}$ h

Exercise 14

- (1) 40 km/h (2) 45 km (3) 126 km
 (4) 20 min (5) 1.30 p.m.
 (6) $13\frac{5}{7}$ km/h

Exercise 15

- (1) 80 m/min (2) $3\frac{3}{8}$ h (3) $2\frac{1}{4}$ h
 (4) 3187 m (5) 30 min (6) 60 km/h

Exercise 16

- A (1) 18.84 cm (2) 31.4 cm (3) 66 cm
 (4) 22 m
 B (1) $2\frac{13}{32}$ m² (2) 28.26 cm² (3) 1.54 m²
 (4) 78.5 cm²

Exercise 17

- (1) $28\frac{4}{7}$ cm (2) 9.42 cm²
 (3) $10\frac{5}{14}$ cm² (4) 2.3 cm²
 (5) 3.44 cm² (6) 26.28 cm
 (7) 12.56 m² (8) $1\frac{5}{7}$ cm²
 (9) 22.28 cm² (10) 41.12 m
 (11) $16\frac{4}{7}$ cm (12) 58.875 cm²

Revision 1

- A (1) 3 (2) 3 (3) 4 (4) 4
 (5) 2 (6) 2 (7) 2 (8) 1
 (9) 3 (10) 2

- B (1) 0.95 (2) 56 (3) $\frac{9}{7}$ (4) 7:10
 (5) 55 (6) $26\frac{7}{18}$ (7) 1.7 (8) 15
 (9) 12.56

- C (1) $67\frac{1}{2}$ km/h
 (2) Huadong: \$480, Lihao: \$160

Exercise 18

- A (1) $\frac{1}{3}$ (2) 25% (3) 2 h (4) 4:1
 (5) $66\frac{2}{3}\%$
 B (1) 20 (2) 10% (3) $\frac{2}{5}$ (4) 66.7%
 (5) 4:1:2

Exercise 19

- A (1) $\frac{1}{5}$ (2) 12 (3) fairy tales
 (4) 10% (5) 1:10
 B (1) $\frac{1}{2}$ (2) 25% (3) 10
 (4) 10 (5) 5:1

Exercise 20

- A (1) 5% (2) \$15 (3) $\frac{1}{2}$
 (4) \$5 (5) 3:5
 B (1) 40 (2) $\frac{3}{10}$ (3) 520
 (4) 40 (5) 8:6:5

Exercise 21

- A (1) 56 cm³ (2) 96 cm³
 (3) 168 cm³ (4) 144 cm³
 B (1) 24 (2) 20
 C (1) 6 cm (2) 12 cm

Exercise 22

- (1) 9 cm (2) 25 cm² (3) 4 l
 (4) 24 cm (5) 14.4 l (6) 150

Exercise 23

- (1) 12.5 cm (2) 5 l
 (3) 42 (4) 9 cm

Exercise 24

- (1) 12.2 cm (2) 6
 (3) 2 cm (4) 4