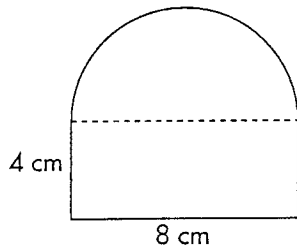
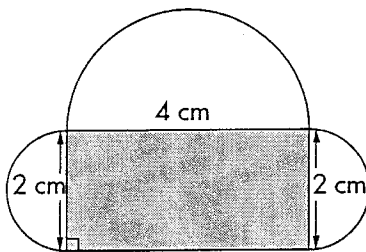


Do these sums. Show all your working clearly.

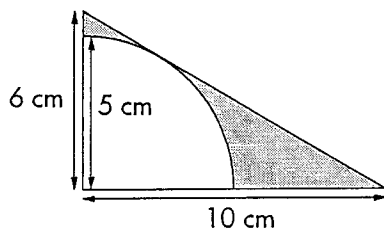
- (1) The figure below is made up of a semicircle and a rectangle. Find the perimeter of the figure. (Take $\pi = \frac{22}{7}$.)



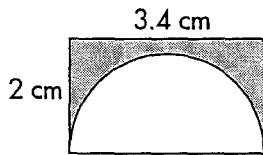
- (2) The figure below is made up of three semicircles and a rectangle. Find the total area of the **unshaded** parts. (Take $\pi = 3.14$.)



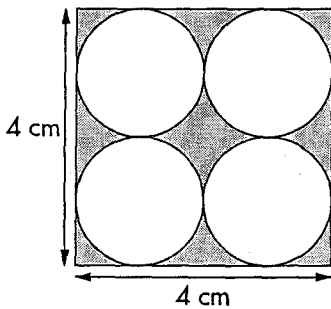
- (3) The figure below shows a quarter circle within a right-angled triangle. Find the total area of the shaded parts. (Take $\pi = \frac{22}{7}$.)



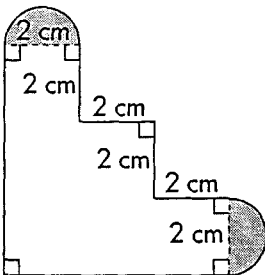
- (4) The figure below shows a semicircle within a rectangle. Find the area of the shaded part. Give your answer correct to 1 decimal place. (Take $\pi = 3.14$.)



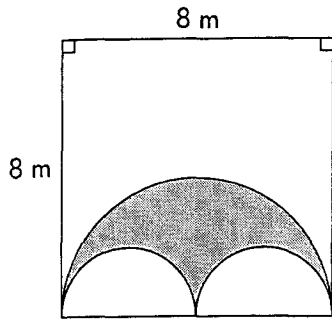
- (5) The figure below shows 4 circles within a square. Find the total area of the shaded parts. (Take $\pi = 3.14$.)



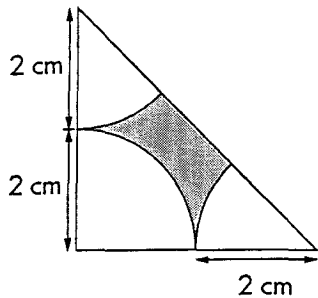
- (6) In the figure below, the shaded parts are semicircles. Find the perimeter of this figure. (Take $\pi = 3.14$.)



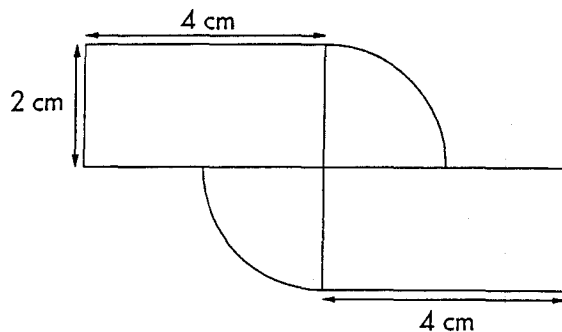
- (7) The figure below shows three semicircles within a square. Find the area of the shaded part. (Take $\pi = 3.14$.)



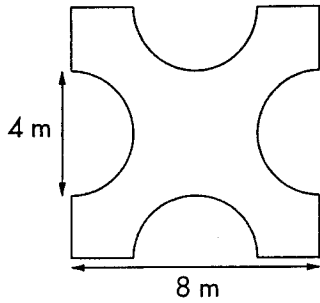
- (8) The figure below shows a right-angled triangle, a quarter circle and 2 half-quarter circles. Find the area of the shaded part. (Take $\pi = \frac{22}{7}$.)



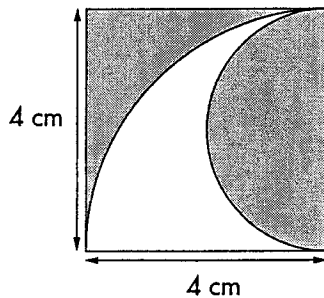
- (9) The following figure is made up of 2 rectangles and 2 quarter circles. Find its area. (Take $\pi = 3.14$.)



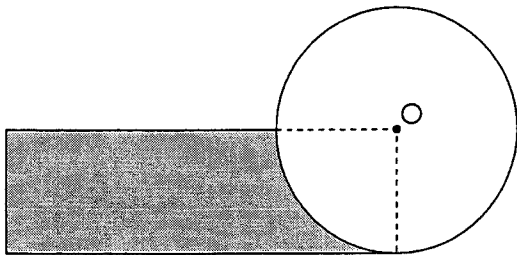
- (10) The figure below shows four semicircles cut out from a square. Find the perimeter of the figure. (Take $\pi = 3.14$.)



- (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 $\pi = 3.14$.)



Answers

(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