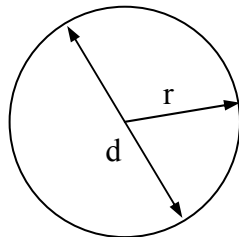


Circles Worksheet

1. The following circle has diameter, d , and radius, r



(Round answers to 2 decimal places and take π to be 3.142)

Find the circumference of the circle when the diameter is:

- a. 4cm b. 6.2cm c. 90.21m

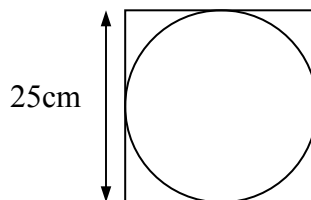
Find the circumference of the circle when the radius is:

- d. 5cm e. 3.2cm f. 45.7m

Find the radius of the circle when the circumference is:

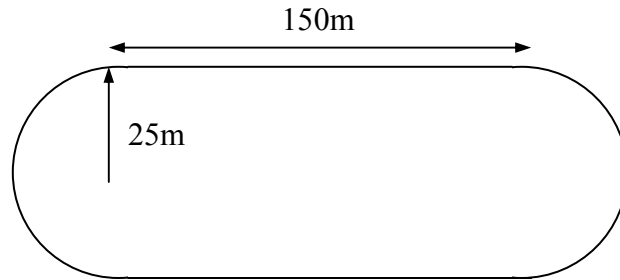
- g. 600cm h. 32cm i. 23.8m

2. John's bicycle wheel has a diameter of 110cm. how many revolutions does the wheel make when he cycles 5km?
3. Suzie has two hoops, one of radius 50cm and the other of radius 35cm. If she rolls both hoops 20 revolutions in a straight line, how much further does the larger hoop travel than the smaller one?
4. John has a square of side 25cm, what is the circumference of the largest circle that he can draw inside the square?



5. Mrs Jenkins jogs around a circular lake of diameter 100m at a speed of 2m/s. How long does it take her to jog three times around the lake?

6. The following is an athletics track. The two straights are 150m, and the curved sections both have a radius of 25m. Find the length of one circuit of the race track



- a. Roger Black (a once famous athlete) sprints around the track in 1 min. 06 secs. What is his average speed in km/h?
- b. A professional athletics track has a length of 400m for one circuit and is shaped as above. If the straights of the track are 100m each, what is the radius of each of the curved sections?
7. Find the perimeter of a quarter-circle of radius 7.2cm
8. A window has the shape below, with a semicircular top section and a square base.
- a. Find the length of metal used to make the frame of the window
- b. If the metal costs 15p per 10cm find the cost of metal needed to make the window

