Circumference

Lesson 30

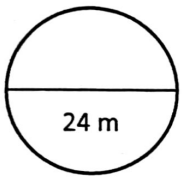
1. Calculate the missing measure.

πd πd

Circumference	335 cm	37.70 cm	25.13cm	48 cm
Diameter	$\frac{C}{\pi}=d$ 106.63cm	12 cm	X2 8cm	$\frac{C}{\pi}=d$ 15.28cm
Radius	53.32cm	÷2 6	4 cm	7.64 cm

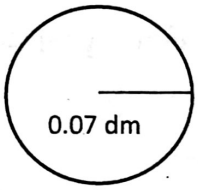
2. Calculate the circumference of each hoop using the given measurements.

a)



$C=d\pi$
$=75.40\,m$

b)



$C=2\pi r$
$0.44dm$

3. Give the radius of a compact disc with a circumference of 37.7 cm.

$C=2\pi r$
$\frac{C}{2\pi}=r$
$\frac{37.7}{2\pi}=6.0\,cm$

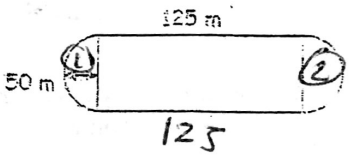
4. Find the diameter of a tree base with a circumference of 90 cm.

$C=\pi d$
$90=\pi d$
$\frac{90}{\pi}=d$
$d=28.65cm$

5. Each straight stretch of a track measures 125m. The semicircles at each end have a radius of 50m. Calculate the distance covered by a runner travelling around the length of the track.

$C=2\pi r$
$=2\pi(50)$
$=314.15$

track
$314.15+125+125$
$=564.16m$



6. A bicycle wheel has a radius of 28cm. what distance will the bicycle have covered after 50 rotations of the wheel?

50 X circumference
$50\times 2\pi r$
$50\times 2\times\pi\times 28=8796.5cm^2$

Radius, Diameter and Circumference

Lesson 31

1. What is the circumference of a round table with a diameter of 1.5m?

$C = \pi(d)$

$= \pi(1.5)$

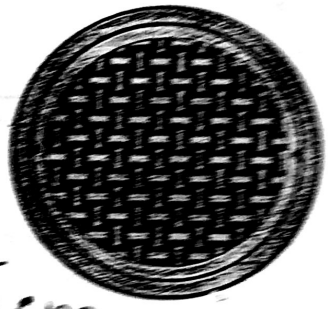
$C = 4.71\,m$

2. A round sewer cover has a circumference of 250 cm. What is the diameter?

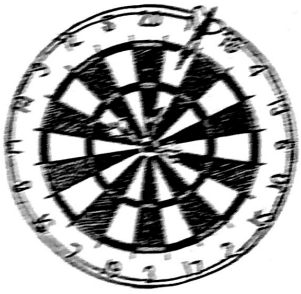
$C = \pi d$

$\frac{C}{\pi} = d$

$\frac{250}{\pi} = d$ $\quad d = 79.5\,cm$



3. A dartboard has a circumference of 94 cm. What is its radius?



$C = 2\pi r$

$\frac{C}{(2\pi)} = r$

$\frac{94}{(2\times\pi)} = r$ $\quad = 14.96\,cm$

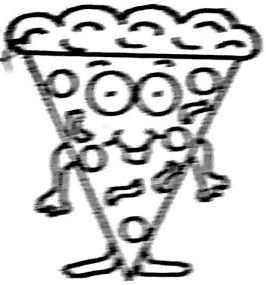
4. The radius of a pizza is 6cm. What is the length of the pizza crust?

circumference

$C = 2\pi r$

$C = 2\pi(6)$

$C = 37.7\,cm$



5. The wheels of a bicycle have a diameter of 70cm. How many full rotations do the wheels have to make in order to cover a distance of 500m? (Km, Hm, Dam, M, Dm, Cm, Mm)

↳ 50000cm

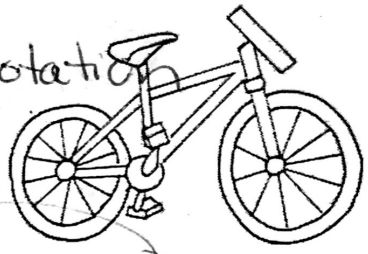
$C = \pi d$

$= \pi(70)$

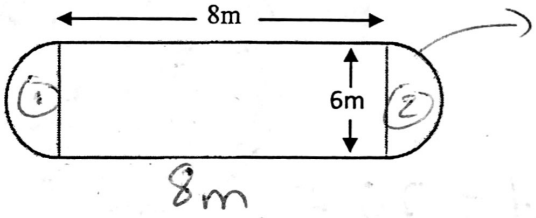
$C = 219.91\text{cm}$

$\frac{50\,000}{219.91} = \#\text{rotation}$

227 rotations



6. A section of a pool is 8m long. The semi-circle at each end has a diameter of 6m. Calculate the perimeter of the pool.



add half circle

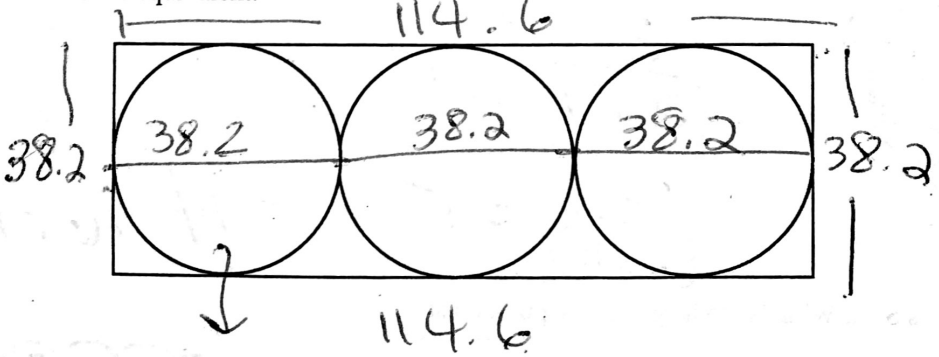
$C = \pi d$

$= \pi(6)$

$= 18.85\text{m}$

pool = 8+8+18.85 = 34.85 m

7. Calculate the perimeter of the rectangle in the figure below if the circumference ~~of one circle is~~ 120cm. Notes, the circles are equivalent.



$C = 120$

$C = \pi d$

$120 = \pi d$

$\frac{120}{\pi} = d$

$38.2 = d$

perimeter

305.6 cm