

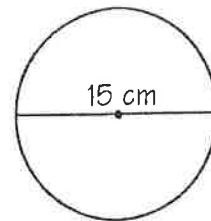
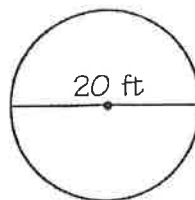
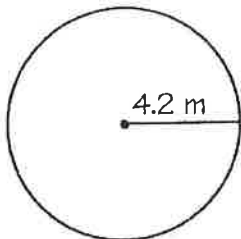
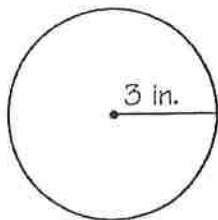
What Did the Pencil Say to the Paper?



Write the letter of each exercise in the circle above or below its answer at the bottom of the page. Some answers are rounded. Use 3.14 for π .



I Use the diameter (d) or radius (r) of each circle to find the circumference (C).



Y $d = 6 \text{ in}$
S $C = 18.84 \text{ in}$

O $d = 8.4 \text{ m}$
U $C = 26.38 \text{ m}$

E $r = 10 \text{ ft}$
O $C = 62.8 \text{ ft}$

T $r = 7.5 \text{ cm}$
Y $C = 47.1 \text{ cm}$

II Solve. Round your answers to Exercises I, O, and N to the nearest whole number.

I Mia enjoys in-line skating. The diameter of the wheels on her skates is 65 mm. How far do her skates travel with each turn of the wheels?

204 mm

N Ray Kozak set a record for spinning the largest rodeo loop. He spun a loop of rope with a diameter of 78 ft. How many feet of rope did he need for the loop?

245 ft

E The distance from the center of an archery target to the outside edge of the target is 24 in. What is the diameter of the target?

$d = 48 \text{ in}$

D The minute hand of a clock is 7 in. long. How far does the point of the hand travel in 60 minutes?

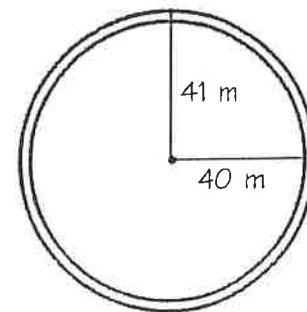
43.96 in

O The world's largest Ferris wheel is the Cosmoclock 21 in Yokohama, Japan. The wheel has a radius of 164 ft. How far would you travel in one turn of this wheel?

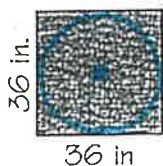
1030 ft

Y Two runners are to race one lap on a circular track. The radius to the inside lane is 40 m. The radius to the outside lane is 41 m. How much of a head start should the outside runner be given?

6.28 m



M Rex has a square sheet of plywood that measures 36 in. on each side. What is the radius of the largest circular disk that he can cut from this sheet?



416 ft	8.4 m	49.3 cm	6 in.	10 ft	48 in.	7.42 m	245 ft	47.1 cm	26.38 m
I	O	O	T	M	Y	E	Y	E	S
204 mm	43.96 in.	7.5 cm	18 in.	44.16 in.	6.28 m	18.84 in.	62.8 ft	218 mm	1030 ft

12.4 What Did the Pencil Say to the Paper?

$$\begin{aligned} 1) \quad C &= 2\pi r \\ &= 2(3.14)(3) \\ &= 18.84 \text{ in} \end{aligned}$$

$$\begin{aligned} 2) \quad C &= 2\pi r \\ &= 2(3.14)(4.2) \\ &= 26.38 \text{ M} \end{aligned}$$

$$\begin{aligned} 3) \quad C &= \pi D \\ &= (3.14)(20) \\ &= 62.8 \text{ ft} \end{aligned}$$

$$\begin{aligned} 4) \quad C &= \pi D \\ &= (3.14)(15) \\ &= 47.1 \text{ cm} \end{aligned}$$

$$\begin{aligned} \text{I) } C &= \pi D \\ &= (3.14)(65) \\ &= 204.1 \text{ MM} \end{aligned}$$

$$\begin{aligned} \text{N) } C &= \pi D \\ &= (3.14)(78) \\ &= 244.92 \text{ ft} \end{aligned}$$

$$\begin{aligned} \text{E) } r &= 24 \text{ in} \\ d &= 48 \text{ in} \end{aligned}$$

$$\begin{aligned} \text{D) } C &= 2\pi r \\ &= 2(3.14)(7) \\ &= 43.96 \text{ in} \end{aligned}$$

$$\begin{aligned} \text{O) } C &= 2\pi r \\ &= 2(3.14)(164) \\ &= 1029.92 \text{ ft} \end{aligned}$$

$$\begin{aligned} \text{Y) } \text{Outer} \\ C &= 2\pi r \\ &= 2(3.14)(41) \\ &= 257.48 \end{aligned}$$

$$\begin{aligned} \text{Inner} \\ C &= 2\pi r \\ &= 2(3.14)(40) \\ &= 251.2 \end{aligned}$$

$$\begin{aligned} \text{difference} &= \\ &= 6.28 \text{ M} \end{aligned}$$

$$\begin{aligned} \text{M) } D &= 36 \text{ in} \\ R &= 18 \text{ in} \end{aligned}$$