

Warm-Up Grade 7Assessment Review

- 1) Find the radius if the circumference is 57.776 cm

show work

$$r = ?$$

$$C = 57.776 \text{ cm}$$

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

$$= \frac{57.776 \text{ cm}}{3.14}$$

$$= 18.4 \text{ cm}$$

$$r = \frac{d}{2}$$

$$= \frac{18.4}{2}$$

$$r = 9.2 \text{ cm}$$



- 2) Calculate the circumference of each circle.

$$r = 21 \text{ m}$$

$$C = ?$$

$$C = 2\pi r$$

$$= 2(3.14)(21 \text{ m})$$

$$= 131.88 \text{ m}$$

## solutions

### Lesson 4.2: Circumference of a Circle

- A circle has diameter 10.5 cm.  
Calculate the circumference of the circle to the nearest millimetre.  

$$C = \pi d$$

$$= 3.14 \times 10.5 \text{ cm}$$

$$= 32.97 \text{ cm}$$

$$\Rightarrow 33.0 \text{ cm}$$
- A circle has radius 4.3 mm.  
Calculate the circumference of the circle to the nearest millimetre.  

$$C = 2\pi r$$

$$= 2 \times 3.14 \times 4.3 \text{ mm}$$

$$= 27.0 \text{ mm}$$
- A circle has circumference 12.6 m.  
Calculate the diameter of the circle to the nearest centimetre.  

$$d = \frac{C}{\pi} = \frac{12.6}{3.14} = 4.0 \text{ m}$$
- Describe two different ways to find the circumference of a circle with radius 5 cm

$$r = 5 \text{ cm} \Rightarrow d = 10 \text{ cm}$$

$$C = ?$$

$$C = \pi d \quad \text{or} \quad C = 2\pi r$$

4)  $r = 5$

$$C = 2 \times \pi \times r$$

$$= 2 \times 3.14 \times 5 \text{ cm}$$

$$= 31.4 \text{ cm}$$

OR

$$C = \pi d$$

Since  $r = 5 \Rightarrow d = 10 \text{ cm}$

$$C = 3.14 \times 10 \text{ cm}$$

$$= 31.4 \text{ cm}$$

# Class / Homework

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Quiz ~~Tomorrow~~

Given  $d$  or  $r$

$$d = 2r$$

$$r = \frac{d}{2}$$

Looking for  $C$

$$C = 2\pi r \quad \text{or} \quad C = \pi d$$

Thursday

Given Circumference  
find "d" or "r"  
use

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

If you need "r", then  
cut diameter in half.