**Lesson 3**

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| Topic Goal: Circumference of Circles  |
| The distance around the circle is called the **circumference**.  |  |  |
| The **diameter** of a circle is any straight line that passes through the centre of the circle and whose endpoints lie on the circle  |  |
| The **radius** of a circle is a line from the centre of the circle to the edge.  |  |
| Example(s):  |

You need to know some abbreviations before you can use the formulas

r = radius

d = diameter

C = Circumference

∏ = pi = ≈ 3.14

There are **two** formulas you can use to find the circumference of a circle.

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| If you are given the **diameter** of the circle useC = ∏dC = 3.14 x diameter  | If you are given the **radius** of the circle useC = 2∏rC = 2 x 3.14 x radius  |
| Find the circumference of the given circle 6m C = ∏dC = 3.14 x diameterC = 3.14 x 6m C = 18.84 m The circumference of the circle is 18.84m | Find the circumference of the given circle 4mC = 2∏rC = 2 x 3.14 x radius C = 2 x 3.14 x 4m C = 25.12mThe circumference of the circle is 25.12m.  |

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|  Practice Questions:  |

1. Which of the two formulas C = ∏d or C = 2∏r would be used to find the circumference of the given circle

7m

Formula:

14cm

Formula:

10cm

Formula:

8m

Formula:

1. Calculate the circumference of each circle
2. r = 7 cm
3. d = 16 m

1. r = 19 cm
2. d = 5m
3. Calculate the circumference of each circle

Circumference:

20cm

Circumference:

15cm

3m

Circumference:

Circumference:

30m

1. Calculate the circumference of each circle

d = 10 cm

Circumference:

1. 
2. 

Circumference:

r = 45 cm

d = 55 cm

1. 

Circumference:



Circumference:

r = 12 cm

1. Farah’s hoop earning has a radius of 1cm. What is the circumference of the earning?
2. The radius of a Canadian quarter is 14.3 mm. What is the circumference of the coin?

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|  Assessment:  |

1. Which of the two formulas C = ∏d or C = 2∏r would be used to find the circumference of the given circle

9m

Formula:

15mm

Formula:

60cm

Formula:

5m

Formula:

1. Calculate the circumference of each circle
2. r = 49 m
3. d = 6 m

1. r = 30 mm
2. d = 75 m
3. Calculate the circumference of each circle

Circumference:

40cm

Circumference:

3mm

90cm

Circumference:

Circumference:

10m

1. Calculate the circumference of each circle

d = 13 cm



Circumference:

1. 

Circumference:

r = 50mm



d = 3cm

1.

Circumference:



Circumference:

r = 11 cm

1. The radius of Jeff’s new car tire is 50 cm. What is the circumference of the tire?
2. The rollercoaster loop has a diameter of 49m. What is the circumference of the loop?