**Lesson 3**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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.

|  |  |
| --- | --- |
| If you are given the **diameter** of the circle use  C = ∏d  C = 3.14 x diameter | If you are given the **radius** of the circle use  C = 2∏r  C = 2 x 3.14 x radius |
| Find the circumference of the given circle  6m    C = ∏d  C = 3.14 x diameter  C = 3.14 x 6m  C = 18.84 m  The circumference of the circle is 18.84m | Find the circumference of the given circle  4m  C = 2∏r  C = 2 x 3.14 x radius  C = 2 x 3.14 x 4m  C = 25.12m  The circumference of the circle is 25.12m. |

|  |
| --- |
| 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?

|  |
| --- |
| 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:

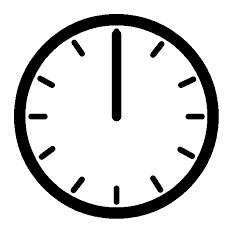
10m

1. Calculate the circumference of each circle

d = 13 cm



Circumference:

1. 

Circumference:

r = 50mm



d = 3cm



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?