

## Lesson 3

**L.O: I am learning to name and understand the relationship between parts of a circle.**



# Parts of a circle

radius

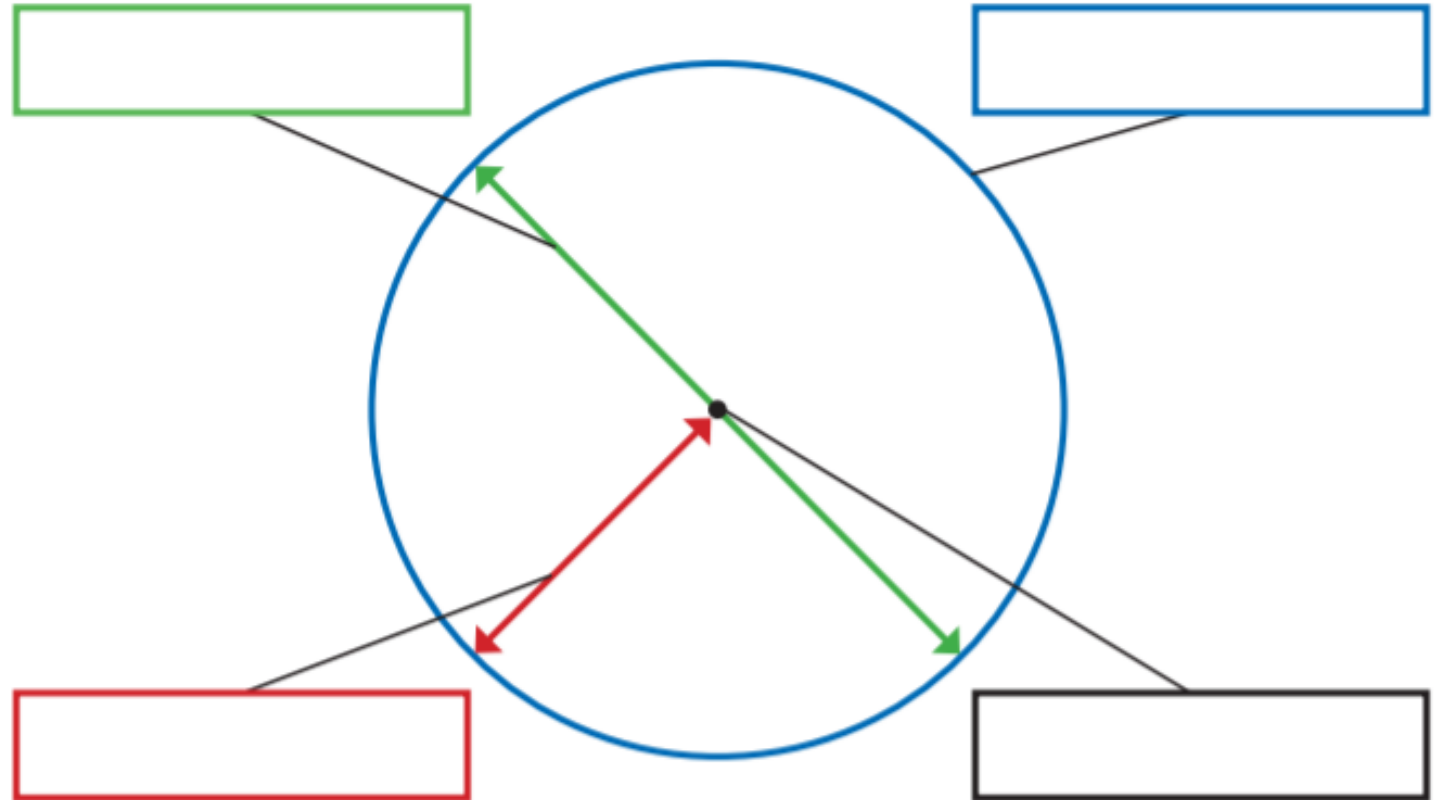
diameter

circumference

centre

The centre of this circle is the small dot in the middle of the shape. **HINT!!**

Which label matches the name for the perimeter of the circle?



# Parts of a circle



radius

diameter

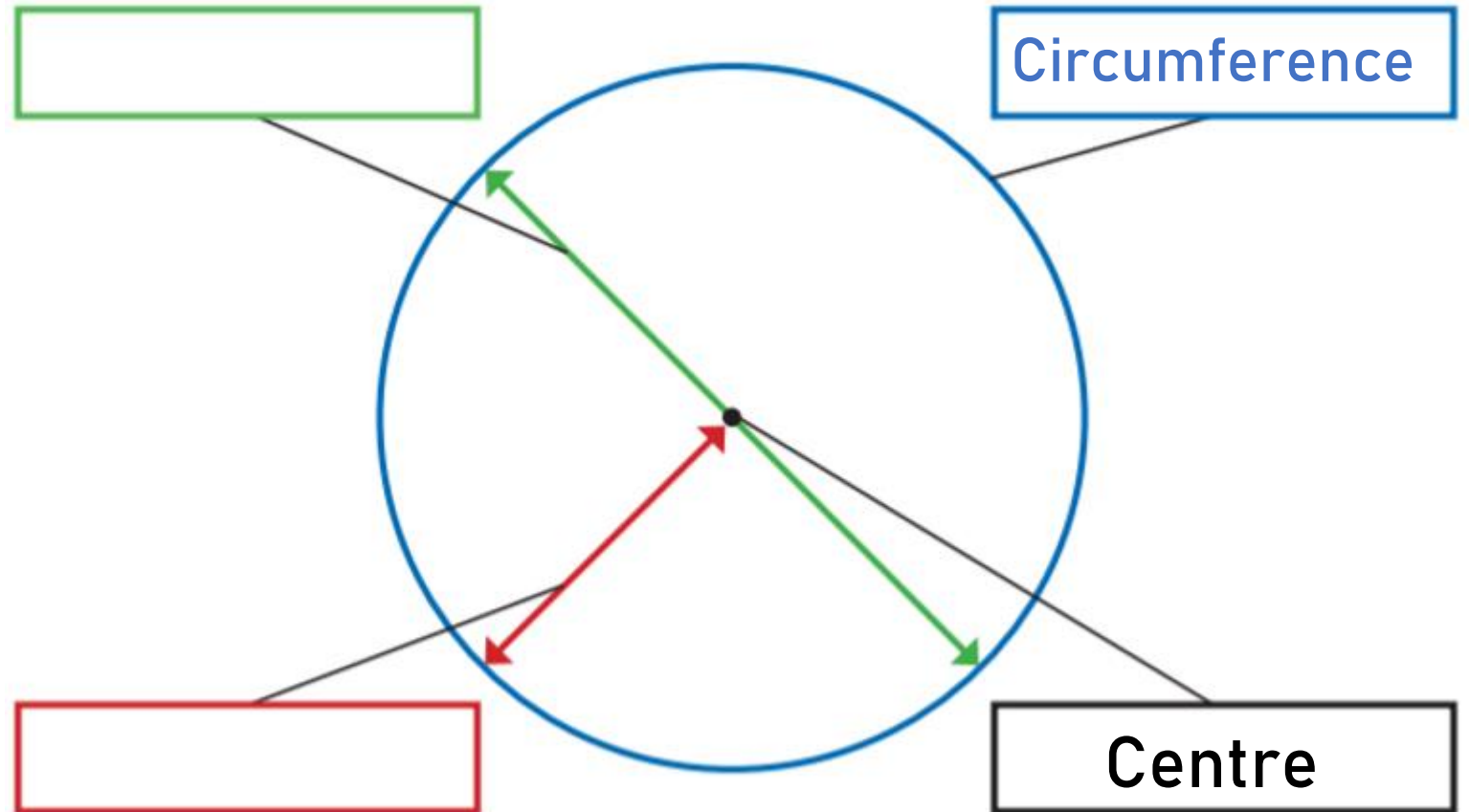
circumference

centre

Which label matches the name for the perimeter of the circle?

The perimeter (around) the circle is called the circumference.

Which label matches the name for the distance that goes through the centre of the circle, from one side to the other?



# Parts of a circle

radius

diameter

circumference

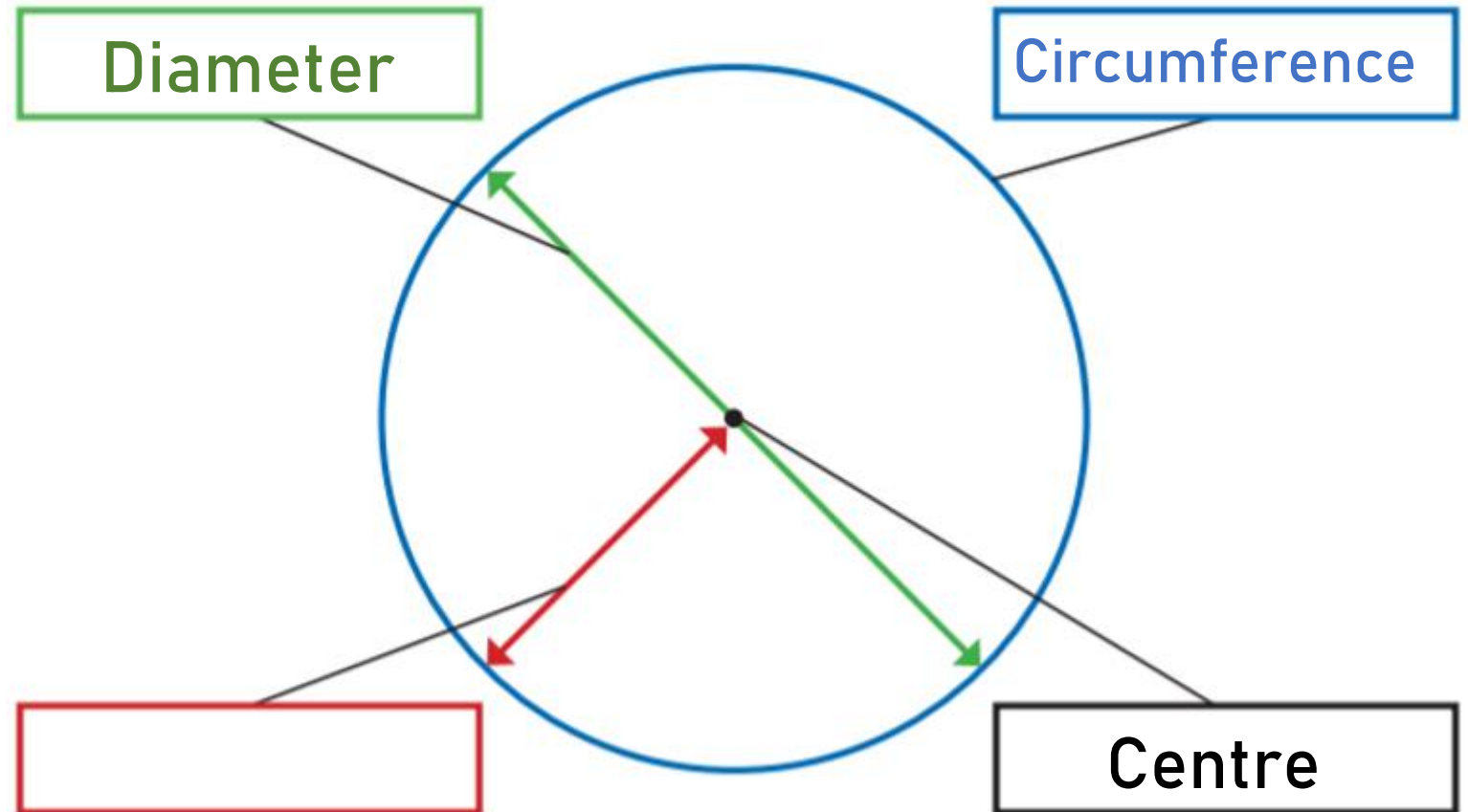
centre

Which label matches the name for the perimeter of the circle?

The perimeter (around) the circle is called the circumference.

Which label matches the name for the distance that goes through the centre of the circle, from one side to the other?

Hint: distance through the centre is the diameter.



# Parts of a circle

radius

diameter

circumference

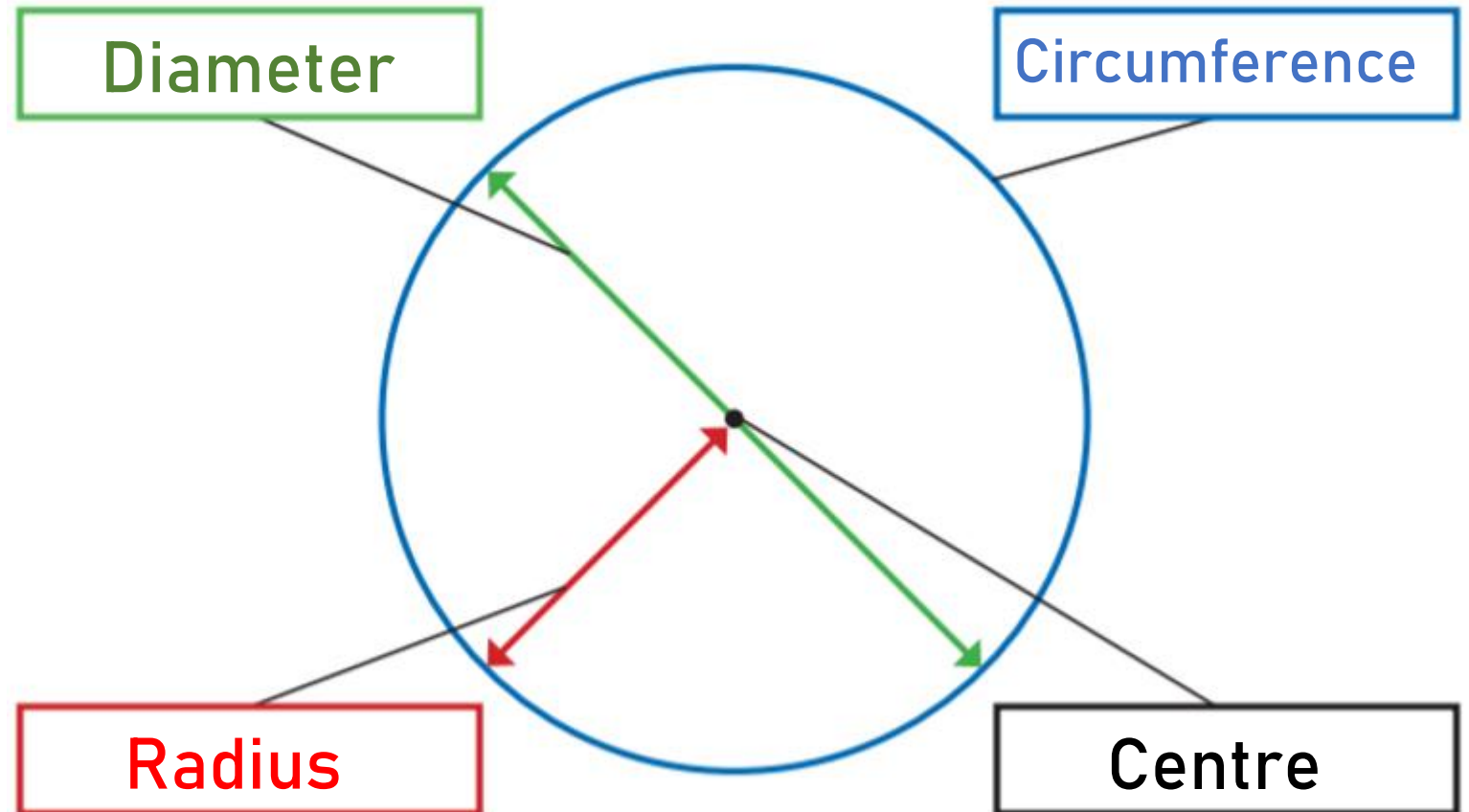
centre

Which label matches the name for the distance that goes through the centre of the circle, from one side to the other?

Hint: distance through the centre is the diameter.

The final label is the radius.  
Look at the circle.

How would you define the radius?



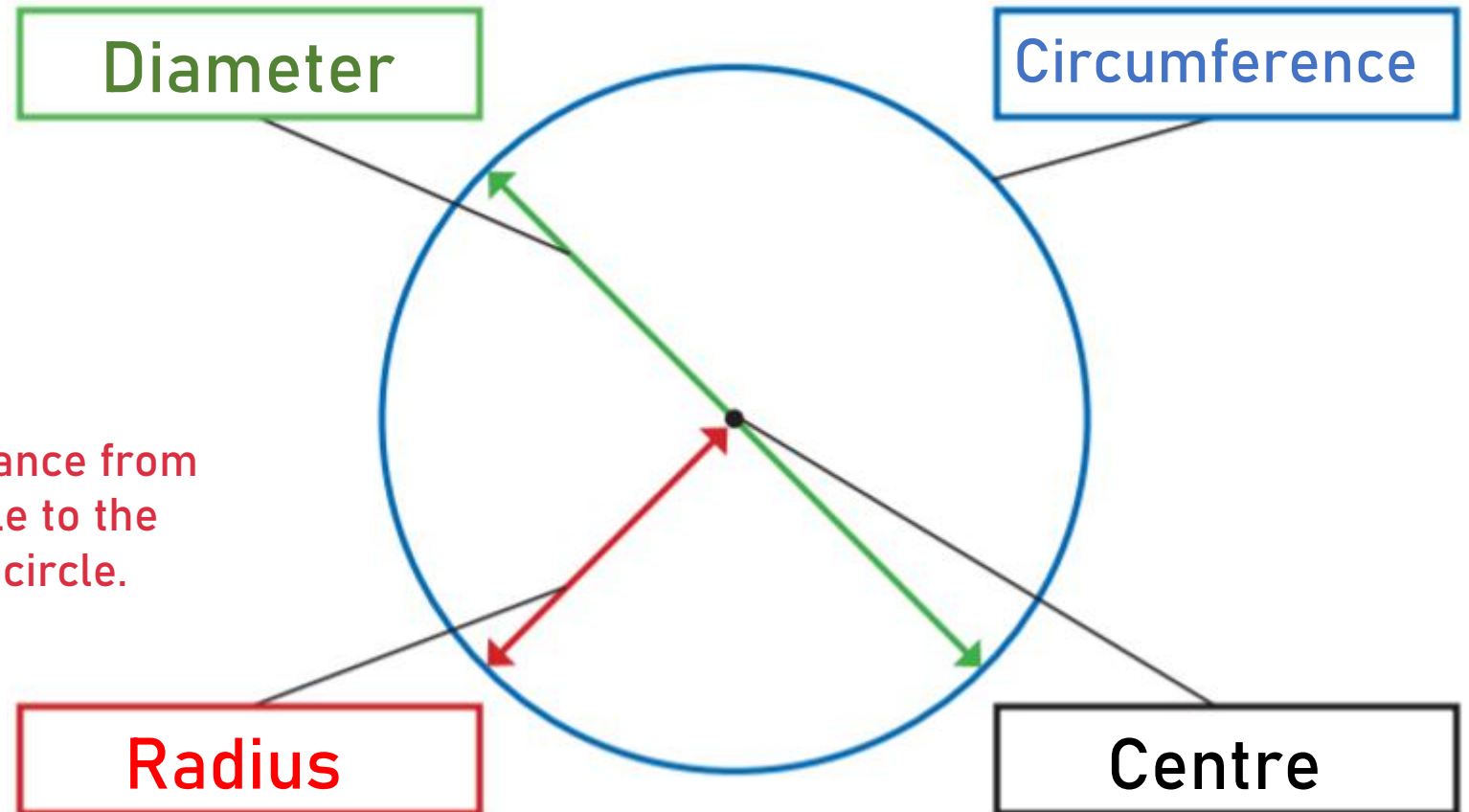


# Parts of a circle

The final label is the radius.  
Look at the circle.

How would you define the  
radius?

The radius is the distance from  
the centre of the circle to the  
circumference of the circle.





# Radius and Diameter

Is there a relationship between the radius and the diameter?

Can you describe this relationship?

# ANSWERS:

Is there a relationship between the radius and the diameter?

Can you describe this relationship?

Yes!

Radius  $\times 2 =$  diameter.

Remember: The diameter must go through the centre point!

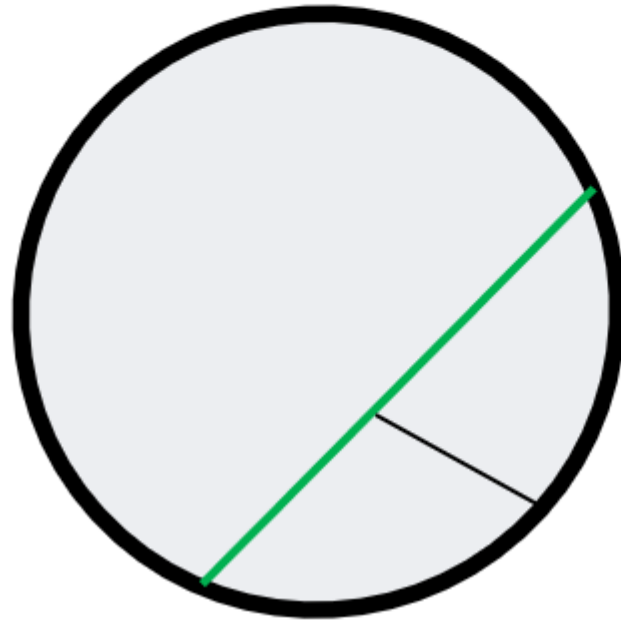




# Diameter and Radius

The circle below is showing the diameter and the radius.

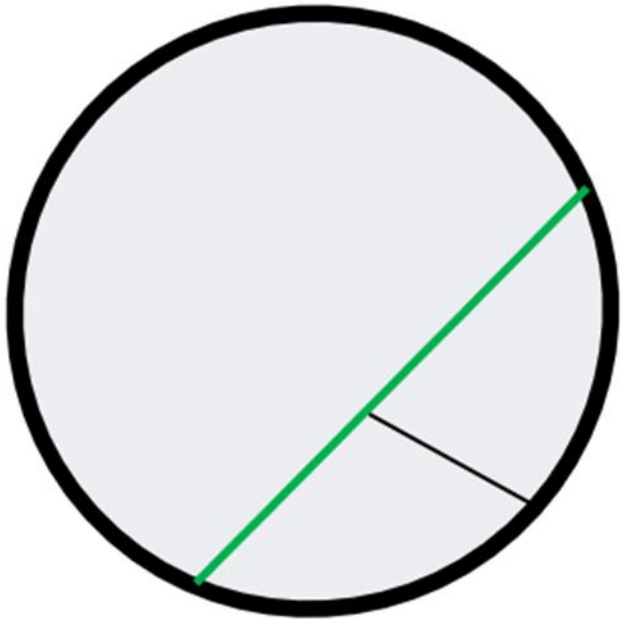
Is this TRUE or FALSE? Why / why not?



# Answer: Diameter and Radius

The circle below is showing the diameter and the radius.

Is this TRUE or FALSE? Why / why not?



This is FALSE.

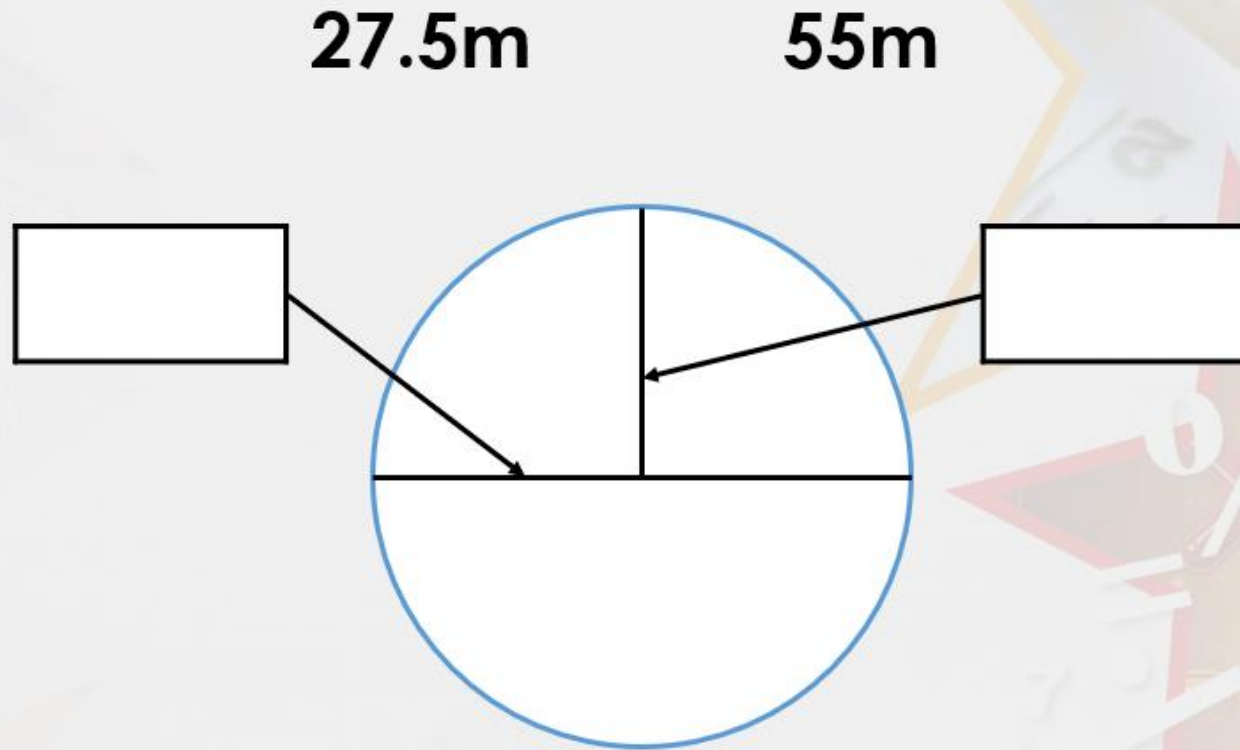
The diameter is the distance that goes through the CENTRE of the circle, from one side to the other. The radius is the distance from the CENTRE of the circle to the circumference.

This image does not have the lines through the centre.



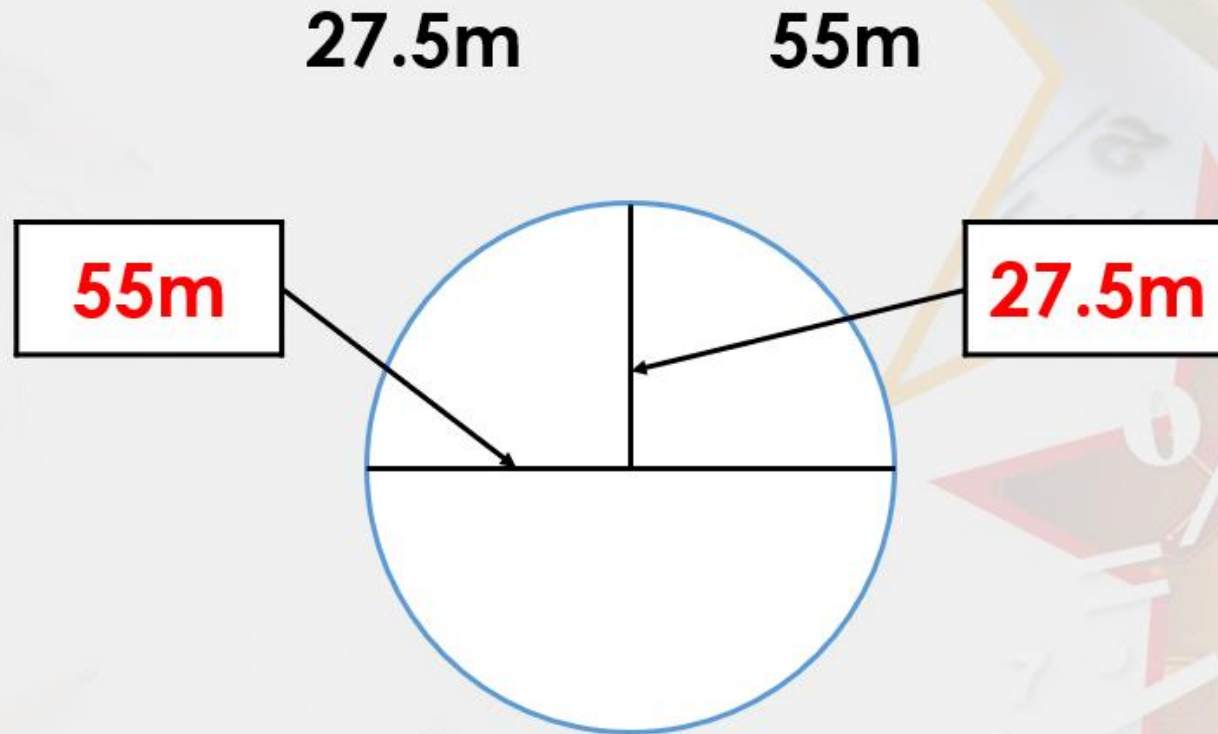
# Diameter and Radius

Use the measurements below to label the radius and diameter.



# Answer: Diameter and Radius

Use the measurements below to label the radius and diameter.





# Reasoning

Jemima says,



If the radius of a circle is 95.5mm then the diameter must be 190mm.

Is she correct?

Explain your answer.

# Answer: Reasoning

Jemima says,



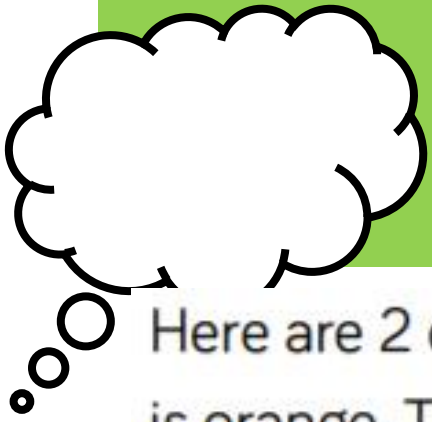
If the radius of a circle is 95.5mm then the diameter must be 190mm.

Is she correct?

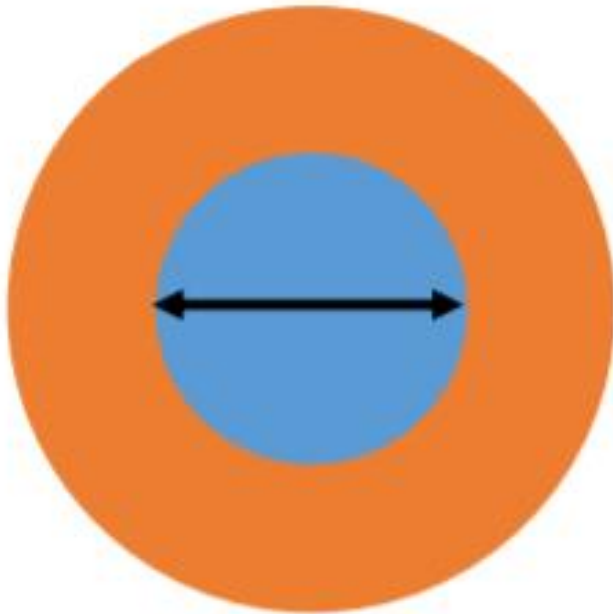
Explain your answer.

**Jemima is not correct because the diameter is always double the length of the radius, so it would be 191mm.**

# Problem Solving



Here are 2 circles. Circle A is blue; Circle B is orange. The diameter of Circle A is  $\frac{3}{4}$  the diameter of Circle B.



If the diameter of Circle B is 12 cm, what is the diameter of Circle A?

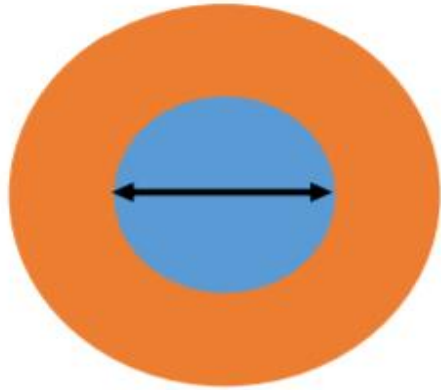
If the diameter of Circle A is 12 cm, what is the radius of Circle B?

If the diameter of Circle B is 6 cm, what is the diameter of Circle A?

If the diameter of Circle A is 6 cm, what is the radius of Circle B?

# Answer: Problem Solving

Here are 2 circles. Circle A is blue; Circle B is orange. The diameter of Circle A is  $\frac{3}{4}$  the diameter of Circle B.



If the diameter of Circle B is 12 cm, what is the diameter of Circle A?

If the diameter of Circle A is 12 cm, what is the radius of Circle B?

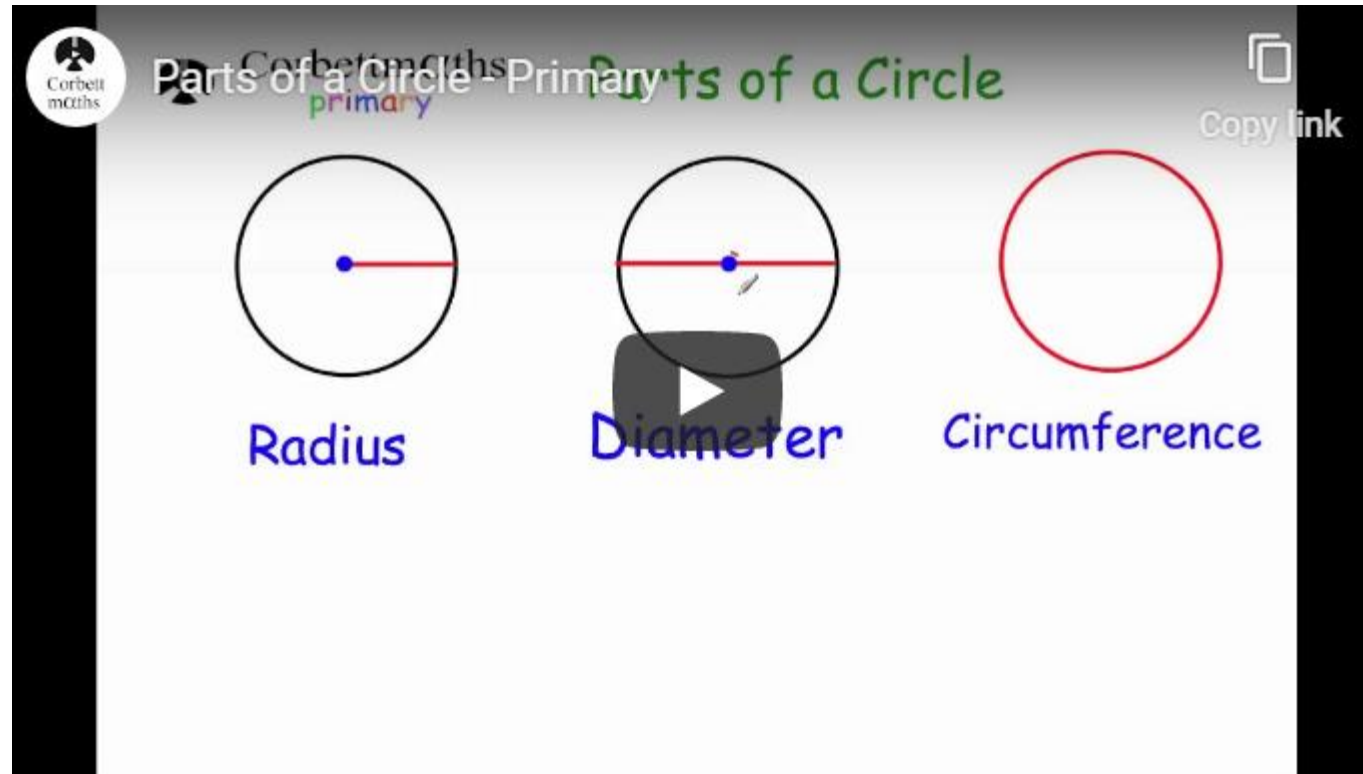
If the diameter of Circle B is 6 cm, what is the diameter of Circle A?

If the diameter of Circle A is 6 cm, what is the radius of Circle B?

- a) 9 cm
- b) 16 cm
- c) 4.5 cm
- d) 8 cm



# A helpful video



<https://corbettmathsprimary.com/2018/06/01/parts-of-the-circle-video/>

Once you have finished turn this assignment in on Google Classroom.



# Task

<b>All</b>	All of you must complete the fluency section.
<b>Most</b>	Most of you will complete the fluency and reasoning sections.
<b>Some</b>	Some of you will complete the fluency, reasoning, and problem-solving sections.

Try your best – it is all we can ask for! 😊

This video may help if you are stuck at any point:

<https://corbettmathsprimary.com/2018/06/01/parts-of-the-circle-video/>

Week 4\_Maths\_Lesson 3

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#### Fluency

Key vocabulary: circle, circumference, radius, diameter, centre	Your answer
<p>The radius has been marked on each circle.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>A</p> </div> <div style="text-align: center;"> <p>B</p> </div> <div style="text-align: center;"> <p>C</p> </div> </div> <p>Is the statement true or false? _____ Explain your answer.</p>	<p>A- B- C-</p>
<p>The diameter has been marked on each circle.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>A</p> </div> <div style="text-align: center;"> <p>B</p> </div> <div style="text-align: center;"> <p>C</p> </div> </div> <p>Is the statement true or false? _____ Explain your answer.</p>	<p>A- B- C-</p>
<p>2a. Use the measurements below to label the radius and diameter.</p> <p style="text-align: center;">6cm      12cm</p> <div style="text-align: center;"> </div>	

Week 4\_Maths\_Lesson 3

Match each radius to its diameter.		
49.5m	107m	
53.5m	99m	
25.5m	83m	
41.5m	51m	
5a. Tick the circle which has a radius of 16.5cm.		
<p>A</p>	<p>B</p>	

#### Reasoning

Key vocabulary: circle, circumference, radius, diameter, centre	Your answer
<p>1a. Jeremy says:</p> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-left: 10px;"> <p>If the radius of a circle is 11cm then the diameter must be 20cm.</p> </div> </div> <p>Is he correct? Explain your answer.</p>	
<p>5b. Find the diameter of the pizza.</p> <div style="text-align: center;"> </div> <p>Explain how you know.</p>	