



Radius and Diameter

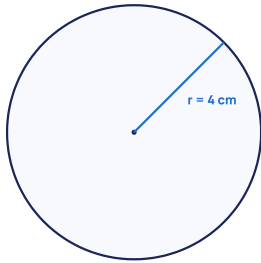


Watch video

MathApex

Name: _____

Date: _____

From the video Radius 3 cm → diameter $2 \times 3 = 6$ cm**1 Now it's your turn!**

The radius is 4 cm. How long is the diameter?

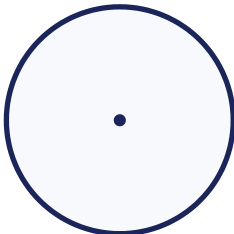
The diameter goes right through the middle of the circle, all the way across: two radii.

$$2 \times \boxed{} = \boxed{} \text{ cm}$$

3 Draw with a compass.

Draw a circle around point M with a radius of 1.5 cm.

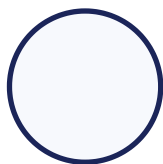
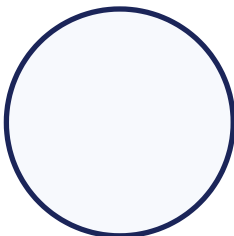
• M

5 Think backwards.

Draw in the diameter and measure it with a ruler. What is the radius?

$$d = \boxed{} \text{ cm}$$

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

6 Measure the diameter.

Lay the ruler through the middle. Write d and r next to each circle.

2 Radius and diameter.

	d
r = 6 cm	
r = 2 cm	
r = 7 cm	

	r
d = 10 cm	
d = 12 cm	
d = 14 cm	

4 Words only.

a) A round plate has a diameter of 30 cm. What is the radius?

$$30 \div 2 = \boxed{} \text{ cm}$$

b) The radius is doubled. What happens to the diameter?

★ Brain teaser

Two circles of the same size with a radius of 4 cm lie next to each other and touch. How wide are both together?



Radius and Diameter

**1 Now it's your turn!**

$$2 \times 4 = 8 \text{ cm}$$

2 Radius and diameter.

$r = 6 \text{ cm} \rightarrow d = 12 \text{ cm}$	$r = 2 \text{ cm} \rightarrow d = 4 \text{ cm}$
$r = 7 \text{ cm} \rightarrow d = 14 \text{ cm}$	$d = 10 \text{ cm} \rightarrow r = 5 \text{ cm}$
$d = 12 \text{ cm} \rightarrow r = 6 \text{ cm}$	$d = 14 \text{ cm} \rightarrow r = 7 \text{ cm}$

3 Draw with a compass.

Set the compass to 1.5 cm, point in M. The circle is then 3 cm wide.

4 Words only.

$$30 \div 2 = 15 \text{ cm}$$

The diameter is doubled too.

5 Think backwards.

$$d = 3 \text{ cm}, r = 1.5 \text{ cm}$$

★ Brain teaser

$$4 \times 4 = 16 \text{ cm}$$

Two diameters side by side.

6 Measure the diameter.

left: $d = 3 \text{ cm}, r = 1.5 \text{ cm}$ right: $d = 2 \text{ cm}, r = 1 \text{ cm}$

For parents and teachers: This worksheet goes with the video "Radius and Diameter" (Math Story 61, Grade 4). The diameter is twice as long as the radius. The circles in tasks 5 and 6 are printed at actual size and can be measured.

More Math Stories with video and worksheet: www.mathapex.app/en/math-stories/