






Circle Algebra Extra Challenge

I can calculate the diameter, radius and circumference of a circle.



The cycling shop sells bicycles of different sizes. Here are the radii of five wheels in the shop. Calculate the diameter of each wheel.

<p>33cm</p> 	<p>37cm</p> 	<p>41cm</p> 	<p>45cm</p> 	<p>49cm</p> 
<p>Radius = 33cm</p> <p>Diameter = _____</p>	<p>Radius = 37cm</p> <p>Diameter = _____</p>	<p>Radius = 41cm</p> <p>Diameter = _____</p>	<p>Radius = 45cm</p> <p>Diameter = _____</p>	<p>Radius = 49cm</p> <p>Diameter = _____</p>

Calculate the circumference of each wheel in metres using the formula **diameter \times 3.142 = circumference**. Show your working out and your answer in metres, e.g. 5.03m.

Circumference =	Circumference =	Circumference =	Circumference =	Circumference =
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Calculate how many times each wheel turns travelling over a **distance of 25m** using the formula **25m \div circumference = number of turns**. Show your working out and round your answers to one decimal point.


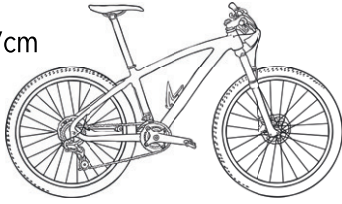



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Circle Algebra Extra Challenge Answers

I can calculate the diameter, radius and circumference of a circle.



The cycling shop sells bicycles of different sizes. Here are the radii of five wheels in the shop. Calculate the diameter of each wheel.

33cm 	37cm 	41cm 	45cm 	49cm 
Radius = 33cm Diameter = 66cm	Radius = 37cm Diameter = 74cm	Radius = 41cm Diameter = 82cm	Radius = 45cm Diameter = 90cm	Radius = 49cm Diameter = 98cm

Calculate the circumference of each wheel in metres using the formula $\text{diameter} \times 3.142 = \text{circumference}$. Show your working out and your answer in metres, e.g. 5.03m.

Circumference = 2.07m	Circumference = 2.33m	Circumference = 2.58cm	Circumference = 2.83cm	Circumference = 3.08cm
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Calculate how many times each wheel turns travelling over a distance of 25m using the formula $25\text{m} \div \text{circumference} = \text{number of turns}$. Show your working out and round your answers to one decimal point.

12.1 turns	10.8 turns	9.7 turns	8.8 turns	8.1 turns
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