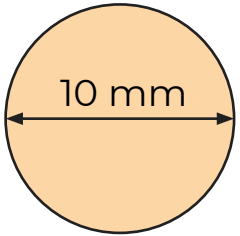
Find the Circumference of a Circle

Mr Lund
Maths

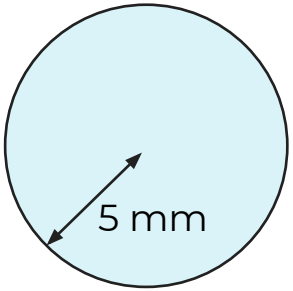
Find the Circumference of a Circle

1. Find the circumference of these circles in terms of π.

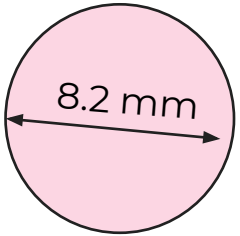
a)



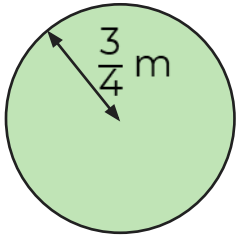
b)



c)



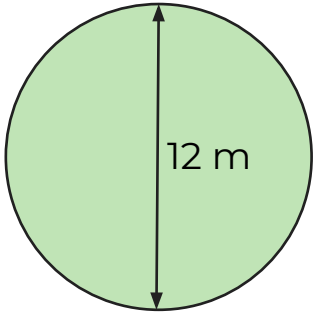
d)



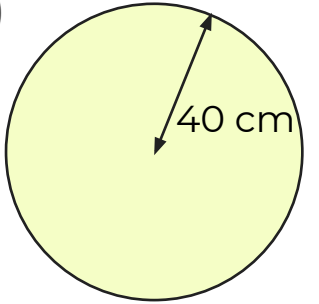
2. Explain why two of the circles in question 1 have the same circumference.

3. Find the circumference of these circles to three significant figures.

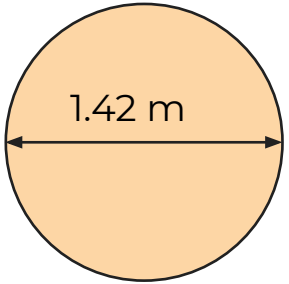
a)



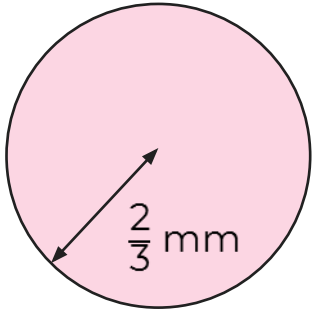
b)



c)

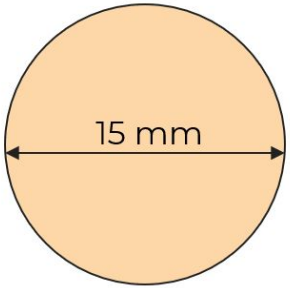


d)



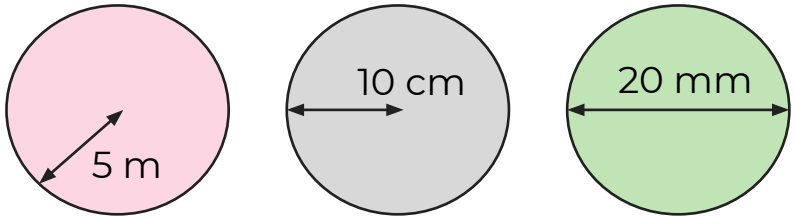
Find the Circumference of a Circle

4. Spot the mistake.



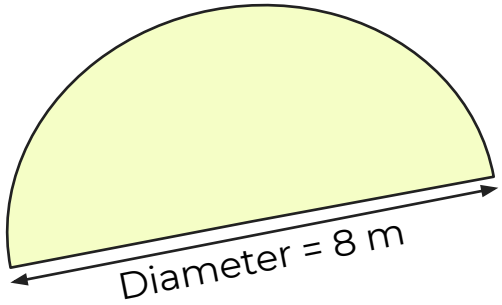
Circumference
15π

5. Place these circles, in terms of the lengths of their circumference, in ascending order.



6. A wheel with a diameter of 30 cm is rolled 50 m. How many complete revolutions does the wheel make?

7. Find the perimeter of the semicircle, giving your answer to three significant figures.

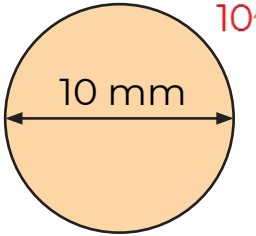


Answers

Find the Circumference of a Circle

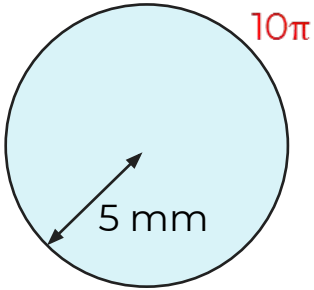
1. Find the circumference of these circles in terms of π.

a)



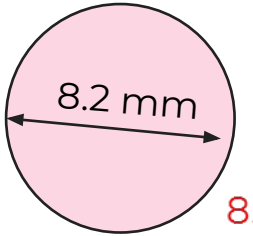
10π mm

b)



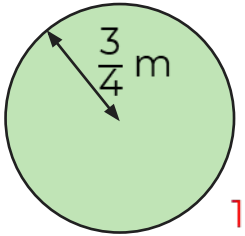
10π mm

c)



8.2π mm

d)



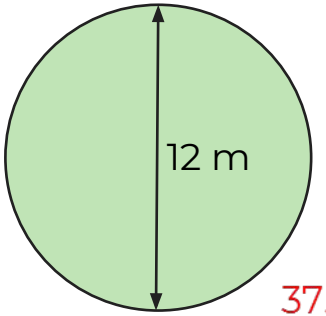
1.5π m

2. Explain why two of the circles in question 1 have the same circumference.

Circles a and b have the same diameter

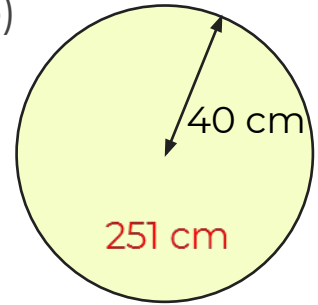
3. Find the circumference of these circles to three significant figures.

a)



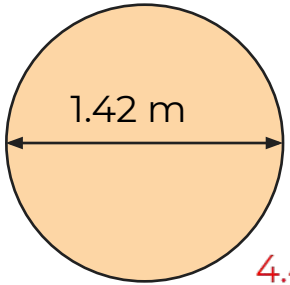
37.7 m

b)



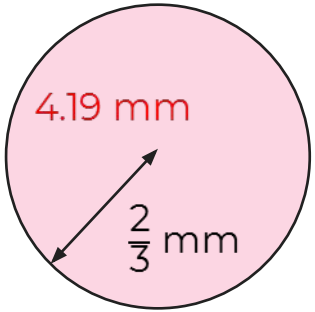
251 cm

c)



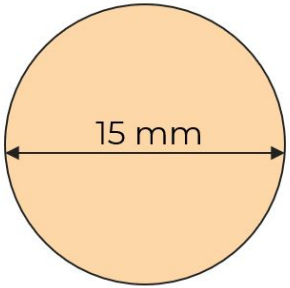
4.46 m

d)



Find the Circumference of a Circle

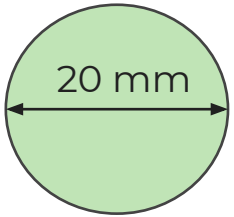
4. Spot the mistake.



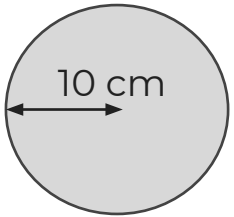
Circumference
15π

No units of measurement

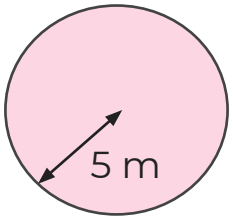
5. Place these circles, in terms of the lengths of their circumference, in ascending order.



20π mm



20π cm

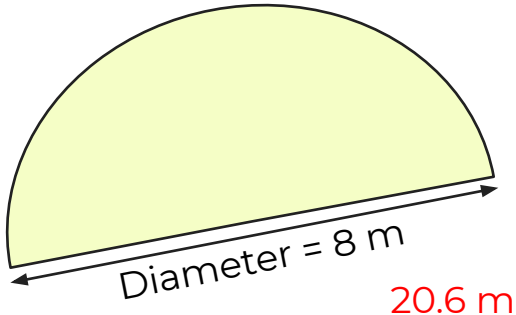


10π m

6. A wheel with a diameter of 30 cm is rolled 50 m. How many complete revolutions does the wheel make?

$5000 \div 30\pi = 53.051\ldots$ 53 revolutions

7. Find the perimeter of the semicircle, giving your answer to three significant figures.



20.6 m