

Examples



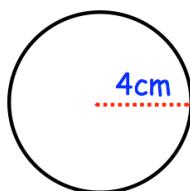
Workout

Click here

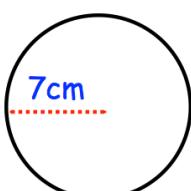
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Question 1: Calculate the area of the following circles. Give your answers to 1 decimal place.

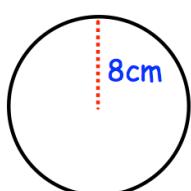
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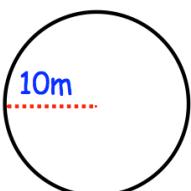
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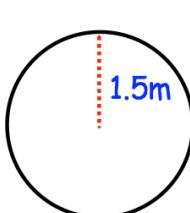
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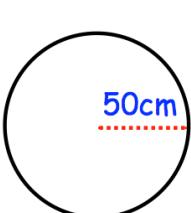
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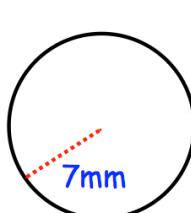
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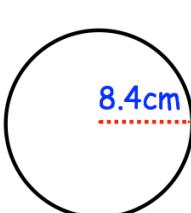
(f)



(g)

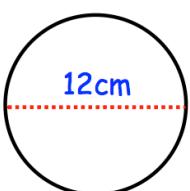


(h)

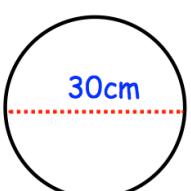


Question 2: Calculate the area of the following circles. Give your answers to 1 decimal place.

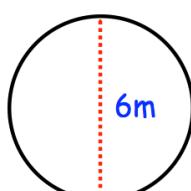
(a)



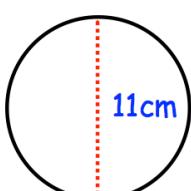
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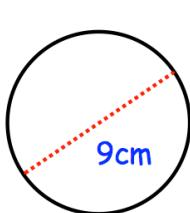
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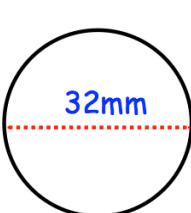
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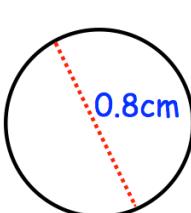
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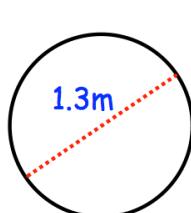
(f)



(g)



(h)



Question 3: Work out the area of the following circles. Give your answers to 1 decimal place.

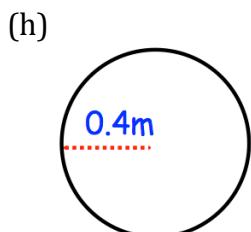
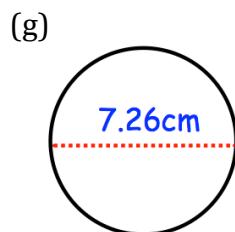
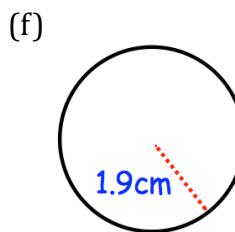
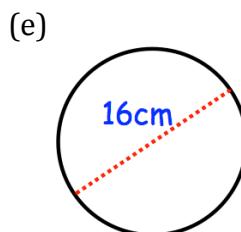
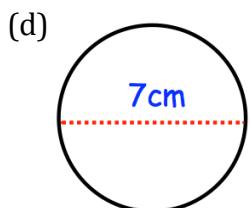
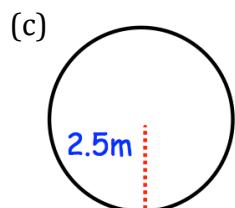
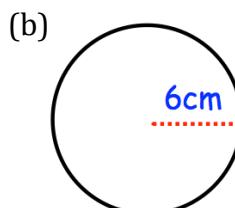
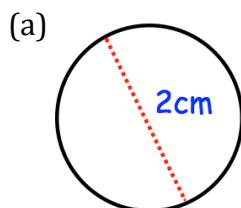
- (a) A circle with radius 9cm
- (c) A circle with diameter 40cm
- (e) A circle with diameter 5 yards

- (b) A circle with radius 12m
- (d) A circle with diameter 1km
- (f) A circle with radius 10.5m

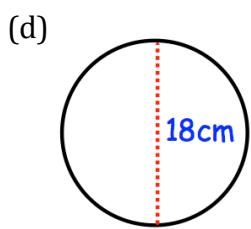
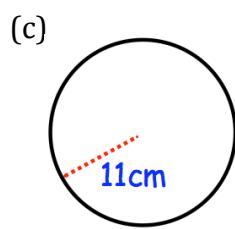
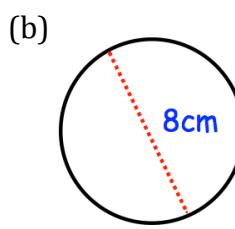
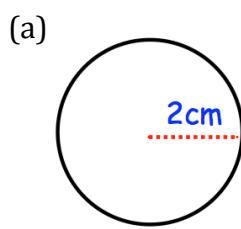
Area of a Circle

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Question 4: Calculate the area of the following circles. Give your answers to 1 decimal place.



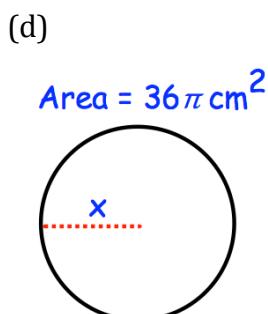
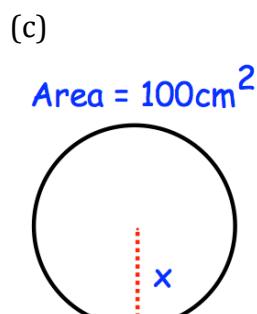
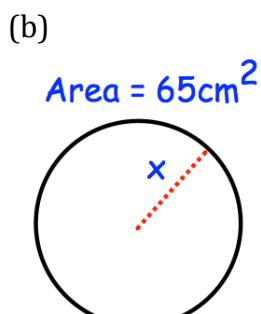
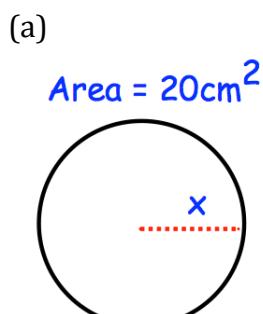
Question 5: Calculate the area of the following circles. Leave your answer in terms of π



Question 6: Work out the area of the following circles. Leave your answer in terms of π

- (a) A circle with radius 7cm
- (b) A circle with radius 1cm
- (c) A circle with diameter 10cm
- (d) A circle with radius 3cm
- (e) A circle with diameter 4cm

Question 7: Find the size of the radius for each of the following circles.
Give your answer to 2 decimal places.

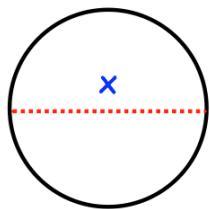


Area of a Circle

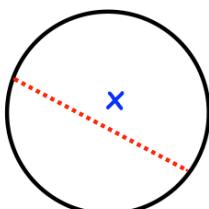
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Question 8: Find the size of the diameter for each of the following circles.
Give your answer to 2 decimal places.

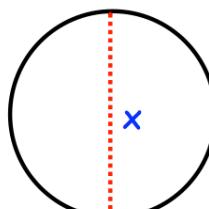
(a) $\text{Area} = 400\text{cm}^2$



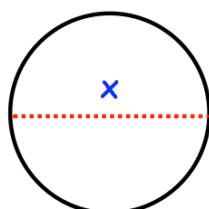
(b) $\text{Area} = 50\text{cm}^2$



(c) $\text{Area} = 10\text{cm}^2$



(d) $\text{Area} = 16\pi\text{cm}^2$

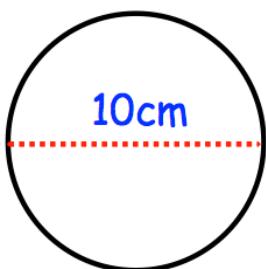


Apply

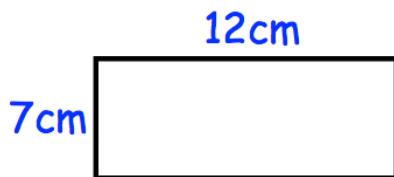
Question 1: A circular table top has a diameter of 90cm. Work out the area of the table top.

Question 2: A circular badge has radius 3cm. Calculate the area of the badge.

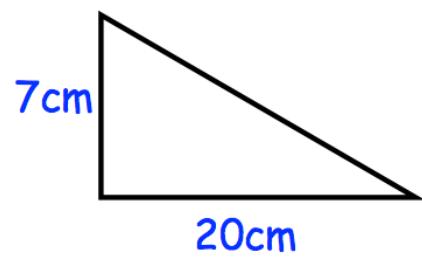
Question 3: Shown below is a circle, a rectangle and a right angled triangle.
Which shape has the greatest area?



Shape A



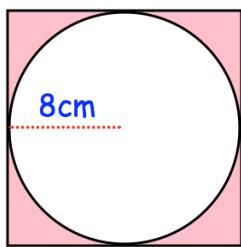
Shape B



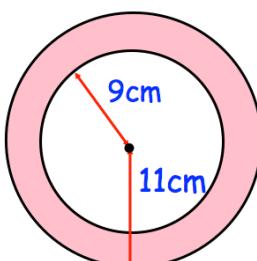
Shape C

Question 4: Calculate the shaded area for each shape below.

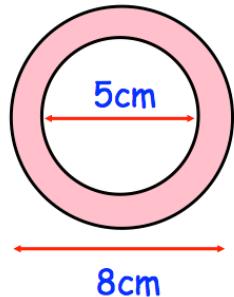
(a)



(b)



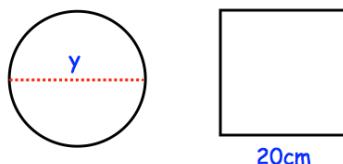
(c)



Area of a Circle

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Question 5: The circle and square have the same area. Find y , the diameter of the circle.



Question 6: The circumference of a circle is 60cm.
Work out the area of the circle.

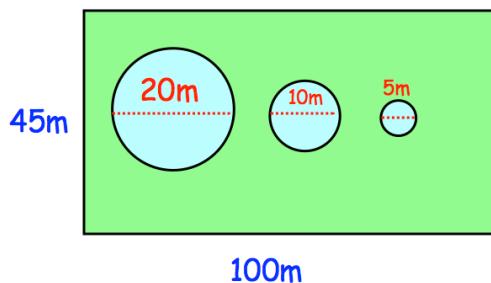
Question 7: The circumference of a circle is 1m.
Work out the area of the circle.

Question 8: The area of a circle is 80cm^2 .
Work out the circumference of the circle.

Question 9: The area of a circle is 2m^2 .
Work out the circumference of the circle.

Question 10: A rectangular lawn is 100m long and 45m wide.
There are 3 circular ponds, with radii 20m, 10m and 5m respectively.
Mrs Jones wants to cover the lawn with grass seed.
Each packet of grass seed covers 50m^2 and costs £1.49

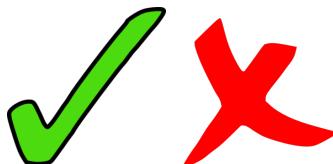
How much will it cost Mrs Jones to cover the lawn with grass seed?



Question 11: A circular plaque of diameter 6cm is cut from a square piece of metal with side length 6cm.

What percentage of the metal is wasted?

Answers



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