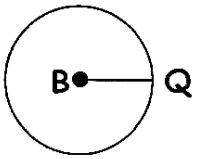
AREA OF A CIRCLE - Obj: To find the area of a circle.

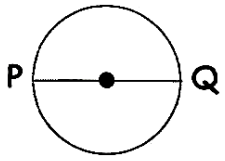
<u>Radius</u> - a line segment from the center of a circle to any point on the circle.



Radius = d ÷ 2

Ex) If the diameter is 16 cm what is the radius?_____

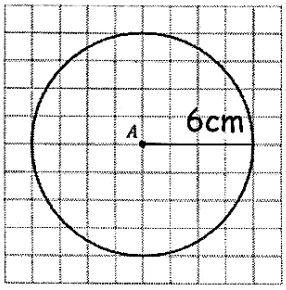
<u>Diameter</u> - a line segment that goes from one point on the circle through the center to another point on the circle.



Diameter = 2r or **Diameter = Radius + Radius**

<u>Area</u>- the number of square units needed to cover the surface of the circle

<u>You will be given one formula for area:</u>



$$A = \pi r^2$$

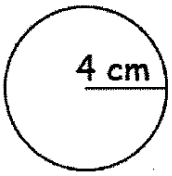
Area = Pi x radius squared

Area = Pi x r x ____

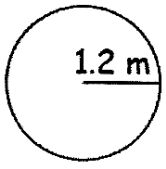
Area = _____ x _____ x _____

A = _____ square cm or A = _____ cm^2

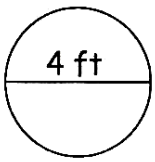
$A = \pi r^2$

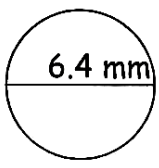


$A = \pi r^2$

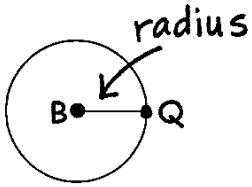


If the diameter is shown – you need to divide it by 2 to find the radius.





AREA OF A CIRCLE - Obj: To find the area of a circle.



Radius - a line segment from the center of a circle to any point on the circle.

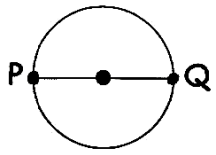
Radius = d ÷ 2

r = _____ ÷ _____

r = _____ cm

Ex) If the diameter is 16 cm what is the radius?_____

Diameter - a line segment that goes from one point on the circle through the center to another point on the circle.



Diameter = 2r or Diameter = Radius + Radius

Area- the number of square units needed to cover the surface of the circle

You will be given one formula for area:

$A = \pi r^2$

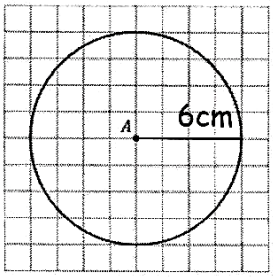
Area = Pi x radius squared

Area = Pi x r x ____

Area = _____ x _____ x _____

A = _____ square cm or A = _____ cm^2

r = 6cm



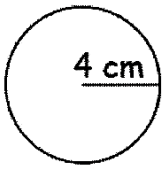
Area _____ the inside.

Area always uses square units!

$A = \pi r^2$

r = _____

d = _____



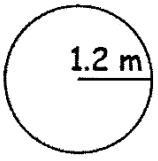
$A = \pi r^2$

A = ____ x ____ 2

$A = \pi r^2$

r = _____

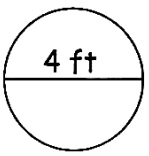
d = _____



If the diameter is shown - you need to divide it by 2 to find the radius.

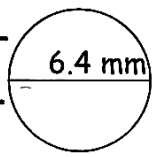
r = _____

d = _____



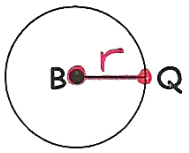
r = _____

d = _____



KEY

AREA OF A CIRCLE - Obj: To find the area of a circle.



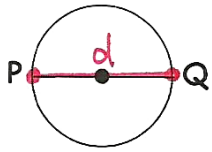
Radius - a line segment from the center of a circle to any point on the circle.

Radius = d ÷ 2

$r = 16 \div 2$

$r = 8$ cm

Ex) If the diameter is 16 cm what is the radius? 8 cm



Diameter - a line segment that goes from one point on the circle through the center to another point on the circle.

Diameter = 2r or Diameter = Radius + Radius

$d = 2 \times$ radius

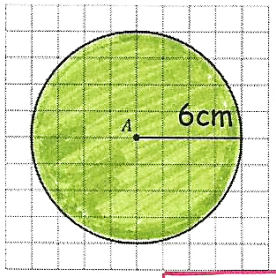
Area- the number of square units needed to cover the surface of the circle

You will be given one formula for area:

$A = \pi r^2$

Area = Pi x radius squared

Area = Pi x r x r



Area covers the inside.

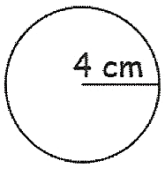
* use the shaded example

Area = 3.14 x 6 x 6

A = 207.24 square cm or A = 207.24 cm^2

Area always uses square units!

$A = \pi r^2$



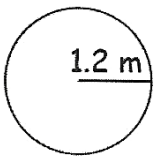
$A = \pi r^2$

$A = 3.14 \times 4^2$

$A = 3.14 \times 4 \times 4$

$A = 138.16 cm^2$

$A = \pi r^2$



$A = \pi r^2$

$A = 3.14 \times 1.2^2$

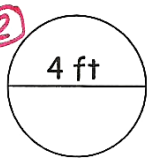
$A = 3.14 \times 1.2 \times 1.2$

$A = 4.52 m^2$

If the diameter is shown - you need to divide it by 2 to find the radius.

$r = 4 \div 2 = 2$

$d = 4$

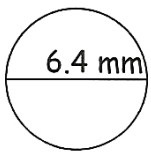


$A = \pi r^2$

$A = 3.14 \times 2^2$

$A = 3.14 \times 2 \times 2$

$A = 69.08 ft^2$



$r = 6.4 \div 2$

$r = 3.2$ mm

$A = \pi r^2$

$A = 3.14 \times 3.2^2$

$A = 3.14 \times 3.2 \times 3.2$

$A = 32.15 mm^2$