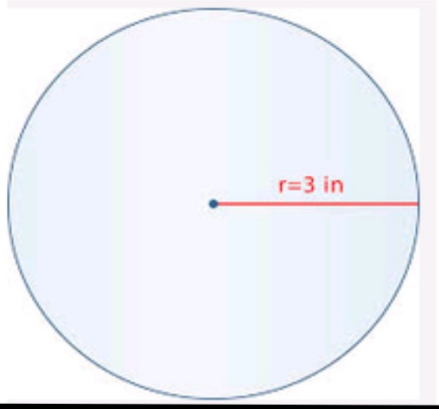
Circles 7.G.4	LEQ: What is the relationship between circumference and diameter?	
		Symbol/ Formula
Radius	distance of the center of a circle to its circumference.	r = radius
Diameter	a straight line going through the center of the circle to touch both sides of the circle	D= diameter
Circumference	the distance around a circle	C= Circumference C= πD C=2πr
Pi	π $\frac{22}{7}$ 3.14	

Cherry pie's delicious!

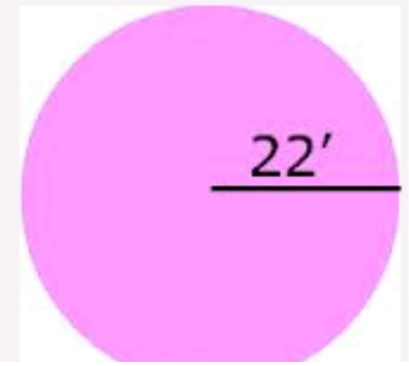
LEQ: how is the formula used for finding area and circumference ?

find the circumference of a circle given the radius

1. Write the formula
   $C = 2\pi r$
2. substitute what you know
3. Evaluate



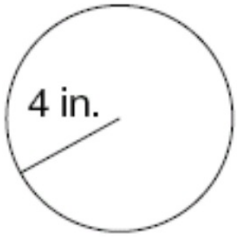
Show your work here



1.Write the formula $C = 2\pi r$

2.Substitute what you know 3.Evaluate

1.



C=

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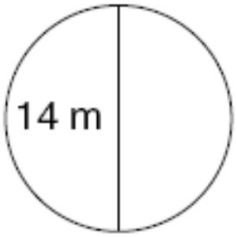

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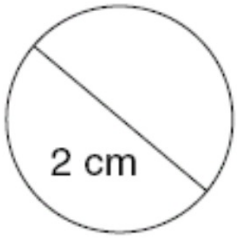

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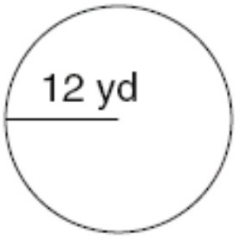

C=

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e.) A circular fence is being placed to surround a tree. The diameter of the fence is 4 feet. How much fencing is used? Use 3.14 for π. Round to the nearest tenth if necessary?

I **P** **S**

f.) How much binding is needed to bind the outside of a circular rug which is 8 meters in diameter? Leave your answer in terms of π.

I **P** **S**

g.) How would the circumference of a circle change if the diameter is doubled? What if the radius is doubled?

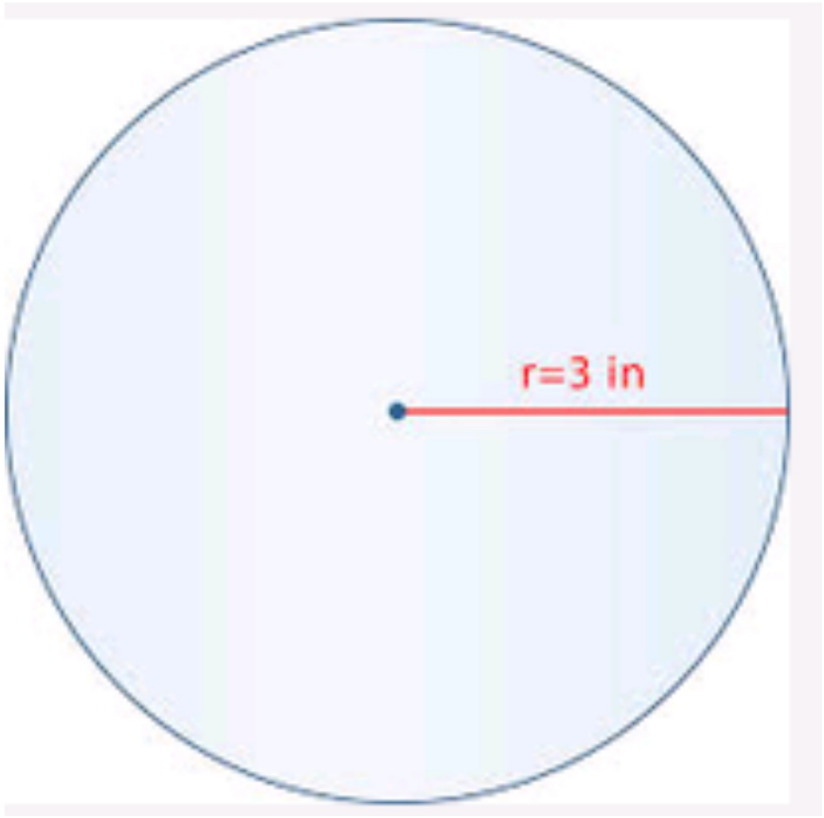
Circles 7.G.4	LEQ: What is the relationship between circumference and diameter?	
		Symbol/ Formula
Radius	distance of the center of a circle to its circumference. ***Half of the Diameter***	r = radius
Diameter	a straight line going through the center of the circle to touch both sides of the circle	D= diameter
Area	the size a surface takes up	A= Area $A=\pi r^2$
Pi	π $\frac{22}{7}$ 3.14	

Apple pies are too!

LEQ: How do you use the formula for area of a circle?

find the area of a circle given the radius

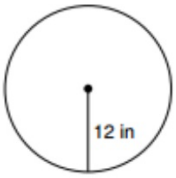
1. Write the formula
   $A = \pi r^2$
2. substitute what you know
3. Evaluate



1. Write the formula $A = \pi r^2$

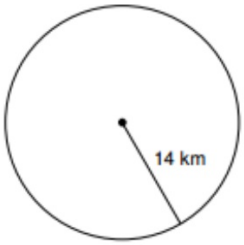
2. Substitute what you know 3.Evaluate

1)



A=

2)



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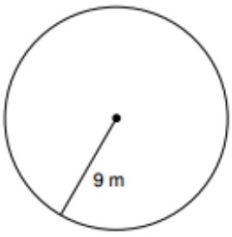

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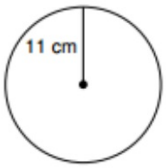


A=

j.) The bottom of a circular swimming pool with a diameter of 30 feet is painted blue. How many square feet are blue?

I	P	S

k.) Find the area of the face of the New York State quarter with a diameter of 24 millimeters. Use 3.14 for π. Round to the nearest tenth if necessary.

I	P	S

Working Backwards

What is the radius of a circle whose area is 28.26 ft²?

1. Write the formula
   $A = \pi r^2$
2. substitute what you know
3. Evaluate

1. $A = \pi r^2$
2. $= 3.14$
3.

square root is the opposite of squares

$1^2 = 1 \quad \sqrt{1} = 1$

$2^2 = 4 \quad \sqrt{4} = 2$

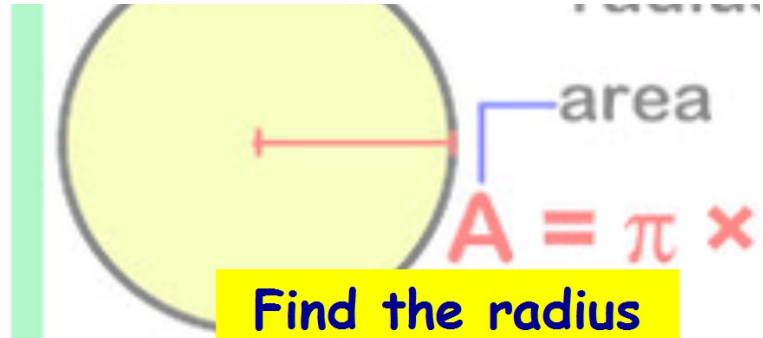
$3^2 = 9 \quad \sqrt{9} = 3$

$4^2 = 16 \quad \sqrt{16} = 4$

$5^2 = 25 \quad \sqrt{25} = 5$

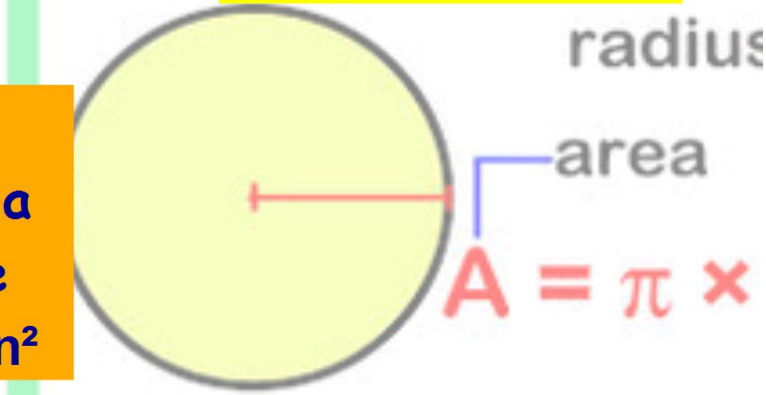
$r^2 = r^2 \quad \sqrt{r^2} = r$

Find the radius of a circle if the area is $50.24cm^2$?



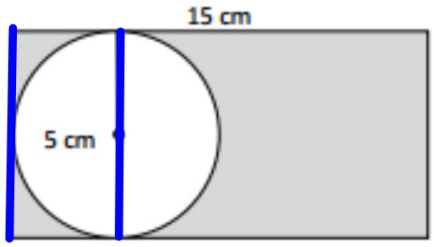
Find the radius of a circle if the circumference is 25.12m

Find the diameter of a circle if the area is $78.5in^2$



LEQ: What is the relationship between the shaded and unshaded region of a shape?

Find the area of the shaded region?



r=d ÷ 2
r= 5 ÷ 2
r= 2.5

STEPS:

1. Find the area of the outside shape.
2. Find the Area of the inside/ unshaded shape.
3. Subtract the two of them to get the area of the shaded region.

1. Area = L x W
   (15) x (5)
   75cm^2
2. Area = πr^2
   3.14(2.5)(2.5)
   19.63cm^2
3. 75cm^2 - 19.63cm^2 = 55.37cm^2