

May 25, 2011

Happy Birthday, Cookie Monster!!

Today's Agenda ~

Notes on circles

Finish tests

Homework: Purple worksheet - Circles

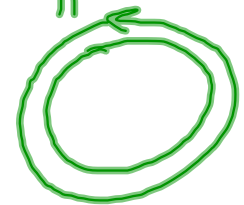
Circles

Do you remember the formulas for...

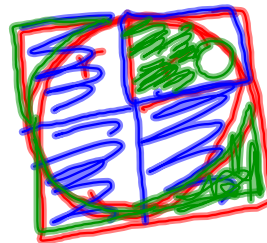
Diameter = $2 \cdot r = r + r$



Circumference = $d \cdot \pi = 2 \cdot r \cdot \pi$



Area = πr^2



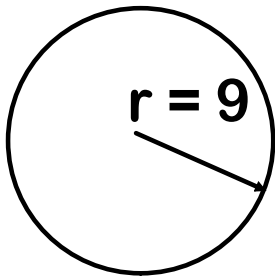
$A = r^2$

$3r^2$
 $+ 14r^2$

$\pi = 3.14$

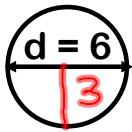
A few practice problems...

Calculate the area and circumference of each circle.
(Use the π key or 3.14.)



$$\text{Area} = \pi \cdot r^2 = \pi \cdot 9^2 = 81\pi = 254.34$$

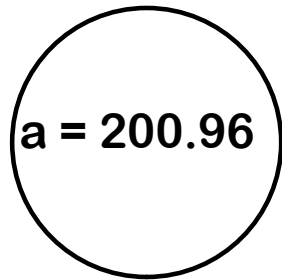
$$\text{Circumference} = 2 \cdot r \cdot \pi = 2 \cdot 9 \cdot \pi = 56.52$$



$$\text{Area} = \pi \cdot 3^2 = 28.26$$

$$\text{Circumference} = d \cdot \pi = 6\pi = 18.84$$

$2 \cdot 3 = 6$



$$\text{Radius} = 8$$

$$\text{Diameter} = 2 \cdot r = 2 \cdot 8 = 16$$

$$\text{Circumference} = d\pi = 16\pi = 50.24$$

$$\frac{A}{\pi} = \frac{\pi \cdot r^2}{\pi}$$

$$\frac{200.96}{\pi} = \frac{\pi r^2}{\pi}$$

$$\sqrt{64} = \sqrt{r^2}$$

$$8 = r$$

$$A \div \pi = r^2$$

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

$$C = 2 \cdot \pi \cdot r$$

$$C \div 2 \div \pi = r$$

A diagram showing the derivation of the radius formula from the circumference formula. It shows the equation $C = 2 \cdot \pi \cdot r$ with the 2 and π terms circled. Below it, the equation $C \div 2 \div \pi = r$ is shown, with the 2 and π terms circled and arrows pointing to the division steps.

**Time to finish the test or
work on the homework.**

Everyone must be SILENT.

**The purple worksheet is due tomorrow,
even if you haven't finished the test.**

After getting the tests back to those who still need to finish,
and after handing out the homework worksheet,
then I will hand back the tests to everyone who finished yesterday.
We will talk tomorrow about how to improve your scores.