

## Starter

Solve each of the following equations

1)  $8x + 9 = 4x - (x + 6)$

3)  $2x + x - 2 = 3x - 2$

2)  $28 - 7x = 7x + 14$

4)  $2(2x + 1) = 4x - 9$

Solve the following, write your answer in scientific notation

5)  $(5 \times 10^3) + (9 \times 10^4)$

Answers

Nov 7-1:42 PM

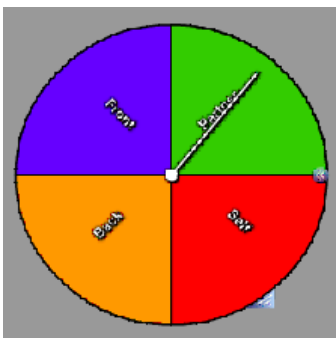
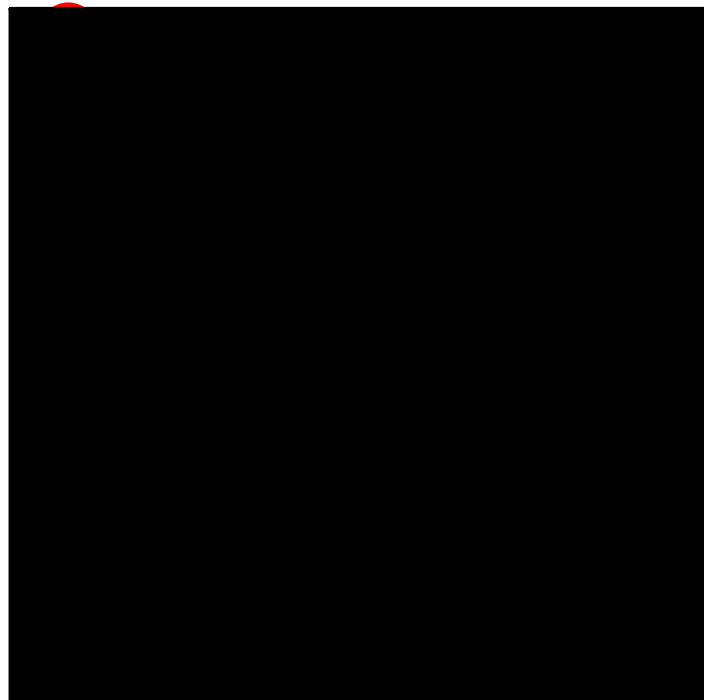
## Solving Equations WKS 4

Score = Completion + Accuracy

### Completion Points

- 5 points: 14 problems
- 4 points: 11-13 problems
- 3 points: 8-10 problems
- 2 points: 5-7 problems
- 1 point: 2-4 problems
- 0 points: 0-1 problems

### Accuracy Points



Sep 17-9:03 AM

A log truck passed by as a person was driving down the road and the person noticed that the radius of every log was marked using neon paint.

It made the driver wonder why the radius was marked. More importantly, it made her think about how easy it was to find the radius of the tree after it was cut, but she wondered how you could find the radius of the tree without cutting it down.

$$r = \frac{C}{2\pi} = \frac{C}{2\pi}$$

*- drill a hole & take a sample & measure*

**How could we find the radius of a tree without cutting it down?**

$C = D\pi$  *- find circumference, divide by  $\pi$ , divide by 2.*

$C = r \cdot \pi \cdot 2$  *- find the circumference by a string.*

*- x-ray the tree*

Nov 11-3:35 PM

## Math 8 Unit 3

### Day ~~16~~: Literal Equations

### 12

Objectives:

~~4k = 4~~ I can solve literal equations for a named variable.

~~$3k - 2 = 16$~~

~~$+2 \quad +2$~~

~~$3k = 18$~~

~~$+3 \quad +3$~~

~~$k = 6$~~

Sep 28-2:09 PM

**Formula:** An equation that states a rule for a relationship among quantities.

$A = lw$        $P = 2(l + w)$        $d = rt$        $A = \pi r^2$

To solve for a specific variable identify the variable you want and use inverse operations to get it alone.

Solve  $d = rt$  for  $r$ .

$\frac{d}{t} = r$  Reason

Solve  $4xy = z$  for  $x$

$\frac{z}{4y} = x$  Reason  
 $\frac{3}{4} \cdot \frac{4}{3} x = \frac{z}{4} \cdot \frac{3}{3}$  mult. prop (=)  
 $x = \frac{3z}{4y}$

Nov 7-6:52 PM

Practice

Solve for the variable that is bold in the parenthesis.

1)  $A = L \cdot W$  (**W**)

$\frac{A}{L} = W$  Division Prop (=)  
 Division Prop (=)

2)  $M = 5.2d$  (**d**)

$\frac{M}{5.2} = d$  Div. Prop (=)

3)  $Q = X + 9$  (**X**)

$X = Q - 9$  Subtraction Prop (=)

4)  $A = \pi r^2$  (**r<sup>2</sup>**)

$\frac{A}{\pi} = r^2$  Div. Prop (=)

5)  $h = \frac{3st}{4}$  (**t**)

$\frac{h}{3} = \frac{st}{4}$  Div. Prop (=)

$\frac{h}{3} = \frac{3}{4}t$   
 $\frac{h}{3} \cdot \frac{4}{3} = \frac{3}{4}t \cdot \frac{4}{3}$  Multi. Prop (=)  
 $\frac{4h}{9} = t$

Nov 11-3:30 PM

# Solving Literal Equations WKS 1

Nov 8-11:55 AM