Do Now:
Evaluate the expression for the given values of the variables

1.) 112 + r, r = 49

112+49 = 161

2.) 43 - s, s = 18

43-18 = 25

3.) 135 ÷ m, m = 5

135÷5=27

Sep 15-9:11 AM

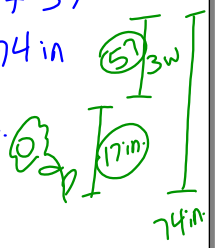
28, 23, 26, 18, 27, 17

28) 17+3w

w=19

17+3(19)
17+57
74 in

After 19 weeks it grows 74 inches.



Sep 17-9:18 AM

1.5 Equations and Solutions

7.EE

- SWBAT write and solve equations using mental math.
- SWBAT represent and analyze situations using algebraic symbols.

Calculators: No

Sep 15-9:59 AM

equation: a mathematical sentence formed by placing an equal sign between two expressions.

A solution of a variable expression is a value which makes the equation true

solving an equation: finding all the solutions that make the equation true.

Sep 15-9:18 AM

Solve the equation using mental math

1.) 15 - n = 4

n = 11

2.) 8(😎) = 32

😎 = 4

3.) r ÷ 12 = 4

r = 48

12 ÷ r = 4

r = 3

Sep 15-9:24 AM

Try this...

1.) 23 + x = 30

x = 7

2.) 9x = 63

x = 7

3.) x ÷ 15 = 2

x = 30

Sep 15-9:24 AM

Tell whether the value of the variable is a solution of: n - 8 = 20

a) n = 12

$n - 8 = 20$

$12 - 8 = 20$

$4 = 20$

No

b) n = 28

$n - 8 = 20$

$28 - 8 = 20$

$20 = 20$

Yes

Sep 19-7:26 AM

Tell whether the value of the variable is a solution of: $p \div 7 = 8$

a.) p = 42

$p \div 7 = 8$

$42 \div 7 = 6$

$6 = 8$

NO

b.) p = 56

$p \div 7 = 8$

$56 \div 7 = 8$

$8 = 8$

yes

Sep 15-9:36 AM

The Times Square New Year's Ball drops a total of 77 feet in 60 seconds. After the first 54 seconds it has dropped 68 feet. How many more feet will it drop? Let *d* represent the distance left to drop.

Part + Part = Total

$68 + d = 77$

$77 - 68 = d$

9 ft = d

$54 + 5 = 60$

6 sec = 5

Sep 19-7:25 AM

A bus has traveled 84 miles toward a city that is 126 miles away. How many more miles must the bus travel to reach the city? Let *m* represent the miles left to travel.

Sep 19-7:30 AM

1.6 Variables in Familiar Formulas

7.NS.1
7.EE

- SWBAT use formulas to find unknown values.
- SWBAT apply proper formulas to find measures.
- SWBAT represent and analyze situations using algebraic symbols.

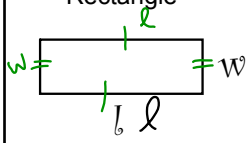
Calculators: No

Sep 11-3:41 PM

Perimeter is the distance around a figure.

- measured in linear units (in, cm, ft, m)

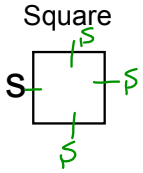
Rectangle



$p = 2l + 2w$

$2l + 2w$

Square

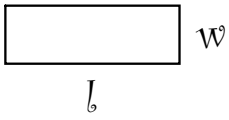


$p = 4s$

Sep 11-3:44 PM

Area is the amount of surface a figure covers.
- measured in square units (in^2, cm^2, ft^2, m^2)

Rectangle



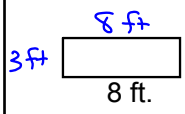
$A = l * w$

Square

A = s * s
or
$A = s^2$

Sep 11-3:52 PM

Find the perimeter and area.



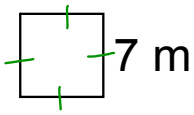
Rectangle

$P = 2l + 2w$
$= 2(8) + 2(3)$
$= 16 + 6$
$= 22\ ft$

$A = l \cdot w$
$= 8 \cdot 3$
$= 24\ ft^2$

Sep 11-3:52 PM

Find the perimeter and area.



$P = 4 \cdot s$
$= 4(7)$
$= 28\ m$

$A = s^2$
$= 7^2$
$= 49\ m^2$

Sep 11-3:55 PM

Homework

pg. 30 #11-27 all
pg. 36 #7-13 all

Sep 11-4:00 PM

Find the side length of a square with an area of 81 square feet.

Sep 11-4:03 PM

Find the side length of a square with a perimeter of 28 feet.

Sep 11-4:03 PM

Distance Formula

$$d = r * t$$

Sep 11-3:56 PM

A rabbit is traveling at a rate of 26.3 feet per second.
How far does the rabbit travel in 5 seconds?

Sep 11-3:58 PM

A bicycle is moving at a rate of 10 feet per second.
How far does the bicycle travel in 60 seconds?

Sep 11-3:58 PM

Challenge Problem

How long will it take a porcupine to travel 264 feet at a rate of 22 feet per second?

Sep 11-4:08 PM

"Perfect practice makes perfect."

Working individually or with a partner, complete the worksheet.

Sep 11-3:59 PM

Exit Pass 1.6

Describe the difference between area and perimeter.

Sep 11-4:00 PM

Reflection of Today's Lesson

1.5 Equations and Solutions
7.EE
SWBAT write and solve equations using mental math.
SWBAT represent and analyze situations using algebraic symbols.

1.6 Variables in Familiar Formulas
7.NS.1
7.G.1
SWBAT use formulas to find unknown values.
SWBAT apply proper formulas to find measures.
SWBAT represent and analyze situations using algebraic symbols.

Sep 15-2:57 PM