

Wednesday
October 14, 2015

AGENDA

Warm-Up

ReTest/PreTest

Turn-and-Talk

K-W-L Chart

Cornell Notes:

Intro. to Expressions

Independent

Activity

Exit Ticket

Homework

Worksheet

HEADS UP!!

Recipe Project

Due today!

Timeline Project

Due Oct. 15/16

GOOD MORNING CLASS!!

Please take out your Interactive Notebook, Folder and 2 PENCILS. MAKE SURE THAT YOU HAVE EVERYTHING THAT YOU NEED FOR CLASS!!

Once you are finished, BEGIN THE WARM-UP.

WARM-UP

page 50

EVALUATE

1) $4 - (-5)$

2) $9 - (+5)$

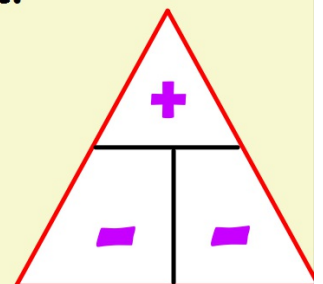
3) $5 + (-9)$

4) $(-3)(-5)$

5) $-36 \div 4$

6) $|3 + (-4)|$

7) Mr. Benard had \$45 in his bank account. If he gained \$15.50, spent \$23.25, lost \$12, and gained \$8, how much does Mr. Betrand have left in his account?



TO live A
creative
LIFE,
we must LOSE
our FEAR of
BEING wrong.

*How do you express yourself
when you....*

are HAPPY?

have FOUND MONEY?

**have purchased a new pair of
Jordans?**

get a BAD GRADE ON A TEST?

are MAD?

**DO WE ALL EXPRESS OURSELVES THE
SAME WAY? Why or Why not??**

On a separate sheet

What do I KNOW about...

What do I WANT to know about...

I have LEARNED...

Expressions

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We will come back to this at the end of the unit

Equations

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Variables

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Introduction to Equations and Expressions

Lesson Essential Question
How do we translate our real life situations into algebra?

What is an algebraic expression?

A math sentence that contains one or more variables and may contain operation symbols.

EXAMPLE: $150 + w$
 $35 \bullet w + z$

CONSTANT

a quantity that does not change.

VARIABLE

a letter or symbol, that can change, and represents a quantity

Two ingredients for an algebraic expression

What is an algebraic equation?

A mathematical statement that two quantities are equal.

EXAMPLE: $15 + s = 27$

SOLUTION

the value of the variable that makes an equation true.

Sum
Greater Than
Increased by
More than
Plus
Add(ed)

ADDITION

Decreased by
Subtracted from
Less than
Fewer/ Farther
Difference

SUBTRACTION

MULTIPLICATION

Product
Twice as much as
Triple
Groups of
Multiplied by
Times

Quotient
Divided By
Split Equally
Cut
Fit Into

DIVISION

Lesson Essential Question

***How do we translate our real life situations
into algebra?***

PRACTICE

1) 14 more than b .

2) 15 divided by d .

3) m multiplied by 67

4) the quotient of x and 25.

5) California has 21 more seats in the U.S. Congress than Texas has. If t represents the number of seats Texas has, write an expression for the number of seats California has.

6) Janet is 15 years younger than Isaiah. Using i for Isaiah, write an expression to show Janet's age.

**Write Algebraic Expressions
for These Word Phrases**

Ten more than a number

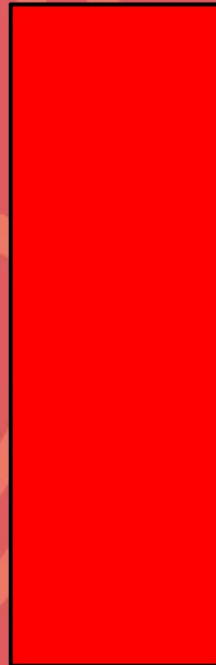
A number decrease by 5

6 less than a number

A number increased by 8

The sum of a number & 9

4 more than a number



Write Word Phrases for These Algebraic Expressions

$$s + 2$$

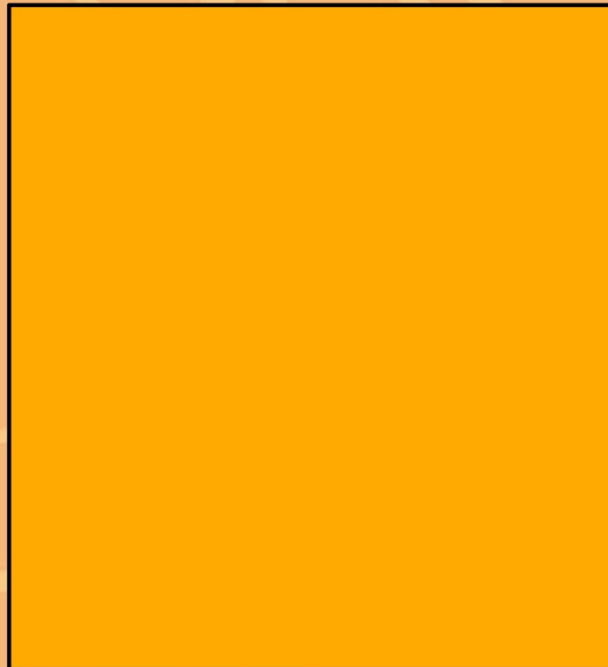
$$k - 1$$

$$x - 31$$

$$b + 7$$

$$n + 6$$

$$z + 9$$



CHOOSE A NUMBER BETWEEN 1 and 10

If you were asked to write an expression for the trick we just performed, what would it be?



EXIT TICKET

Write a word phrase for the algebraic expression:

$$3x + 4$$

Write an algebraic expression for the word phrase:

10 less than the product of a number and 3

Write an algebraic expression for the situation:

Alvin is twice the age of his nephew, Keith, k

Thursday
October 15, 2015

AGENDA

Warm-Up
Review Homework
Cornell Notes:
Evaluate Expressions
Independent
Activity
Exit Ticket
Homework
Worksheet

HEADS UP!!

Recipe Project
OverDue!

Timeline Project
Due Oct. 15/16

Hello CLASS!!

Please take out your Interactive Notebook, FOLDER and two PENCILS. MAKE SURE THAT YOU ARE PREPARED FOR CLASS!!

BEGIN THE WARM-UP QUIETLY.

WARM-UP

page 52

EVALUATE

1) $17 - (6 - 5)^{15}$



2) $5 + \frac{-3}{4} \div \frac{6}{10} \bullet 4$

3) The temperature on Friday in Alaska was -15°F . The temperature on Saturday was 19°F higher. What was the temperature on Saturday?



4) The stock for Skittles at the beginning of the week was \$34.59. Over the next three days, the stock lost \$18.34 on Monday, gained \$12.19 on Tuesday and gained \$2.01 on Wednesday. What was the price of the share of stock at the end of Wednesday?



Evaluating Expressions

Lesson Essential Question

How do we evaluate an expression for a given value?

How do we evaluate an algebraic expression?

In algebra, to evaluate means to substitute a number for the variable.

EXAMPLE 1:

Evaluate the expression $n + 7$, when $n = 3$

SOLUTION: (wherever I see the variable n , replace it with 3)

$$\begin{aligned} n + 7 &= (3) + 7 \\ &= 10 \end{aligned}$$

EXAMPLE 2:

Evaluate the expression $3x$, when $x = 3$

SOLUTION: (wherever I see the variable x , replace it with 3)

$$\begin{aligned} 3x &= 3(3) \\ &= 9 \end{aligned}$$

EXAMPLE 3:

Evaluate the expression $3x + 7$, when $x = 3$

SOLUTION: (wherever I see the variable x , replace it with 3)

$$\begin{aligned} 3x + 7 &= 3(3) + 7 \\ &= 9 + 7 = 16 \end{aligned}$$

Why do we use parenthesis?

Parenthesis help us keep track of the number we've replaced the variable with.

*Evaluating
Expressions*

Lesson Essential Question

PAGE 69

How do we evaluate an expression for a given value?

***PRACTICE
we try together***

IN PEN

EVALUATE EACH EXPRESSION

1) $4t$, when $t = 6$ 2) $x - 8$, when $x = 9$ 3) $63 \div z$, $z = 9$

4) $3r + 5$, $r = 6$ 5) $2 - 7w$, $w = -4$ 6) $2e + 5e$, $e = -4$

Don't forget our calculations with rational numbers.

$$m + 2.8, \quad m = -4.3$$

substitute
simplify

$$r^2 - 3, \quad r = 5$$

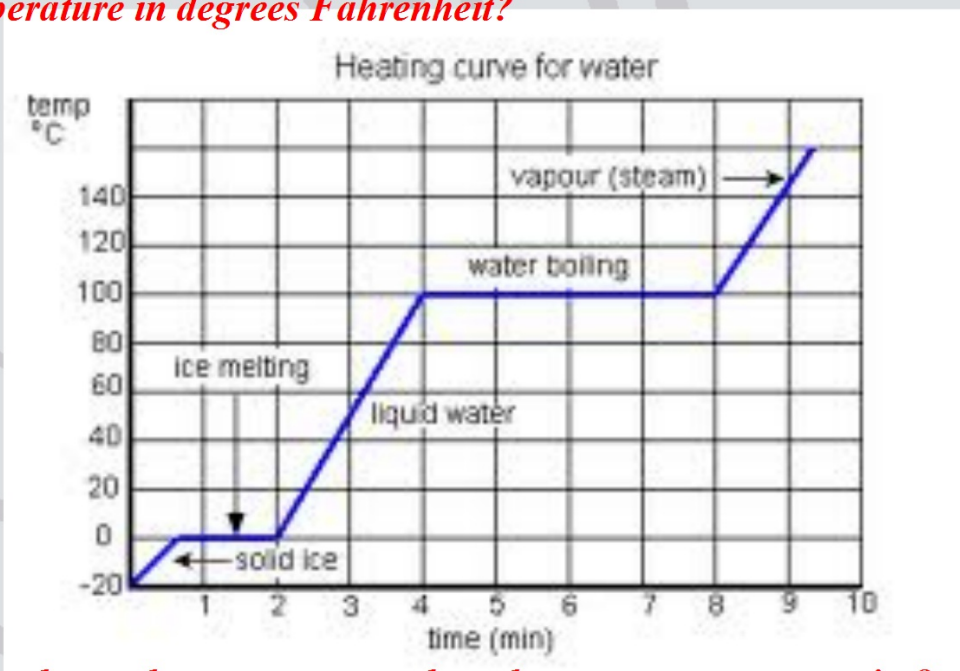
substitute
simplify

$$(-s)(t), \quad s = \frac{1}{3} \quad t = 1 \frac{4}{5}$$

substitute
simplify

WORD APPLICATION

1) The expression $1.8c + 32$ can be used to convert a temperature in degrees Celsius, C, to degrees Fahrenheit, F. If the temperature is 40°C , what is the temperature in degrees Fahrenheit?

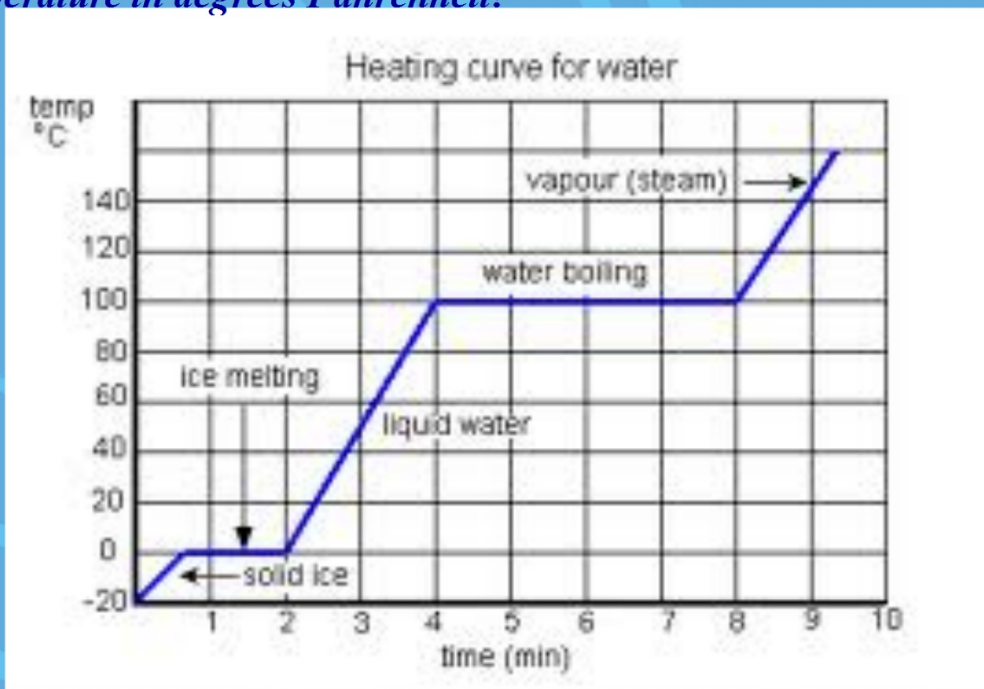


2) At about what temperature does the water start to vaporize?

3) What is the vapor point in degrees Fahrenheit?

EXIT TICKET

1) The expression $1.8c + 32$ can be used to convert a temperature in degrees Celsius, C, to degrees Fahrenheit, F. If the temperature is 30°C , what is the temperature in degrees Fahrenheit?



- 2) At what temperature does the water start to boil?
3) What is the boiling point in degrees Fahrenheit?

Friday
October 16, 2015

AGENDA

- Warm Up
- Review Homework
- Cornell Notes:
*Expressions- Combining
Like Terms*
- Independent
Activity

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Once you are finished, BEGIN THE WARM-UP QUIETLY.

WARM-UP on page 54

COPY. WRITE an algebraic expression for each.

- 1) the product of 15 and x
- 2) 25 less than k
- 3) 34 times w
- 4) 2 times the sum of a number and 4
- 5) A 5-ft pine tree was planted and grew 2 feet each year. Write an algebraic expression for the height of the tree after t years.