MONDAY
Sept. 14, 2015

WARM-UP

Page 24

Evaluate the following expressions

1) 27 + 27 =

2) 19 - 19 =

3) 27 - 27 =

4) 19 + 19 =

5) 27 + (-27) =

6) 19 + (-19) =

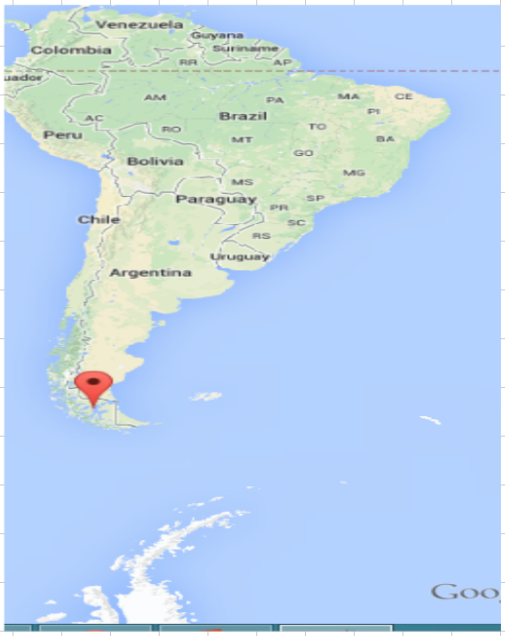
7) -27 + (-27) =

8) -19 + (-19) =

In three or more complete sentences, tell what you've discovered.

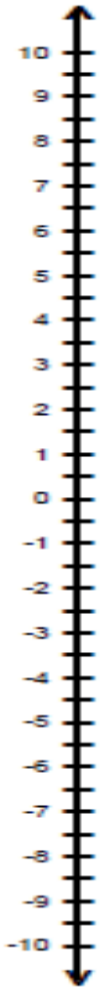
LAUNCH TIME: GLOBAL AWARENESS

Punta Arenas is a city located on the southern tip of Chile, only 843 miles away from Antarctica.



During the fall season, the temperature in Punta Arenas can go from high as 8° C to as low as -15° C.

LAUNCH TIME: GLOBAL AWARENESS



Today, the temperature is expected to be a high of 9°C by 12 noon. By 8pm, the temperature is expected to drop to -6°C.

Write a mathematical expression to represent the temperature change.

What was the change in today's temperature?

Topic: Word Problem

Lesson Essential Question

What strategies can we use to solve word problems with precision?

What is IPS?

A system used to help find (or identify) key Information, construct a Picture, and arrive at a Solution.

What does this look like?

INFORMATION	PICTURE	SOLUTION
key details from the problem	draw a visual to help solve	solve using the information and picture

EXAMPLE

This past weekend, Mr. Betrand spent $18 eating at Red Lobsters'. When he checked his bank account, his balance was -$8. How much money did Mr. Betrand begin with?

What does this look like?

INFORMATION	PICTURE	SOLUTION

Practice #1

Katherine is very interested in cryogenics (the science of very low temperatures). With the help of her science teacher she is doing an experiment on the effect of low temperatures on bacteria. She cools one sample of bacteria to a temperature of -51°C and another to -76°C. What was the temperature difference in the two experiments?

What does this look like?

INFORMATION	PICTURE	SOLUTION

Worksheet

Practice #2

On Tuesday the mailman delivers 3 checks for $5 each and 2 bills for $2 each. If you had a starting balance of $25, what is the ending balance?

What does this look like?

INFORMATION	PICTURE	SOLUTION

Worksheet

Practice #3

You owe $225. on your credit card. You make a $55. payment and then purchase $87 worth of clothes at Dillards. What is the integer that represents the balance owed on the credit card?

What does this look like?

INFORMATION	PICTURE	SOLUTION

Worksheet

Practice #4

If it is -25F in Rantoul and it is 75F in Honolulu, what is the temperature difference between the two cities?

What does this look like?

INFORMATION	PICTURE	SOLUTION

Worksheet

Practice #5

During the football game, Justin caught three passes. One was for a touchdown and went 52 yards. The other was for a first down and was for 17 yards. The other was on a screen pass that did not work so well and ended up a gain of -10 yards. What was the total yardage gained by Justin on the pass plays?

What does this look like?

INFORMATION	PICTURE	SOLUTION

Worksheet

Practice #6

James plays in the backfield of the Big Town football team. Last week he ran four plays from the halfback position. He made "gains" measured in yards of 13, 4, 11, and 5. What were his average yards per gain? Round your answer to the nearest tenth of a yard.

What does this look like?

INFORMATION	PICTURE	SOLUTION

Worksheet

TUESDAY
Sept. 15, 2015

WARM-UP

Page 28

THE NUMBER SYSTEM
CCSS 7.NS.1d

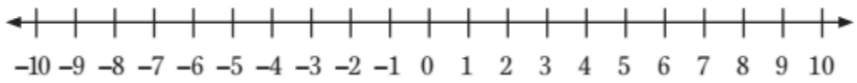
Working with Integers I

Using appropriate arrow notations on number lines such as the one pictured below, represent the expressions given and find the results. Use a new number line for each sentence.

1. $-8 + 12 = ?$

2. $(-7) + (-3) = ?$

3. $5 + (-9) = ?$



Topic: Multiplying/ Dividing Integers	**Lesson Essential Question** How are the operations of multiplication and division related? How do you decide if a product or quotient is positive or negative?
What do I do?	**Ignore the signs** **Multiply or divide numbers given** **Count the number of negative signs**
What sign will the answer be?	**If an EVEN amount: the answer is Positive** **If an ODD amount: the answer is Negative**
Examples:	1) $-5(9)$ 2) -6×-7 3) $-42/2$ 4) $\frac{68}{-4}$ 5) $-18 \div 3$ 6) $4(-5)(-3)$

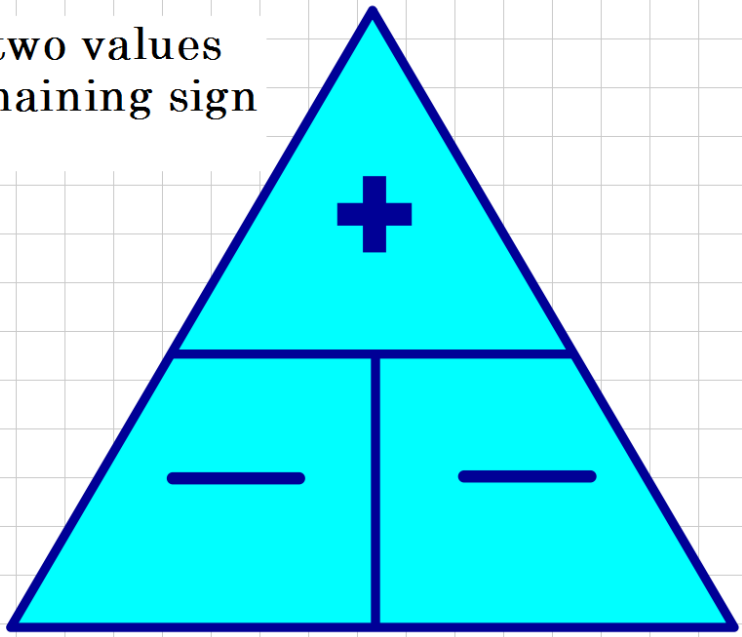
Topic: Multiplying/ Dividing Integers

Lesson Essential Question

How are the operations of multiplication and division related? How do you decide if a product or quotient is positive or negative?

Triangle Method

Circle the signs of the two values in the problem, the remaining sign is part of the answer.



Examples:

-6 x 3 =

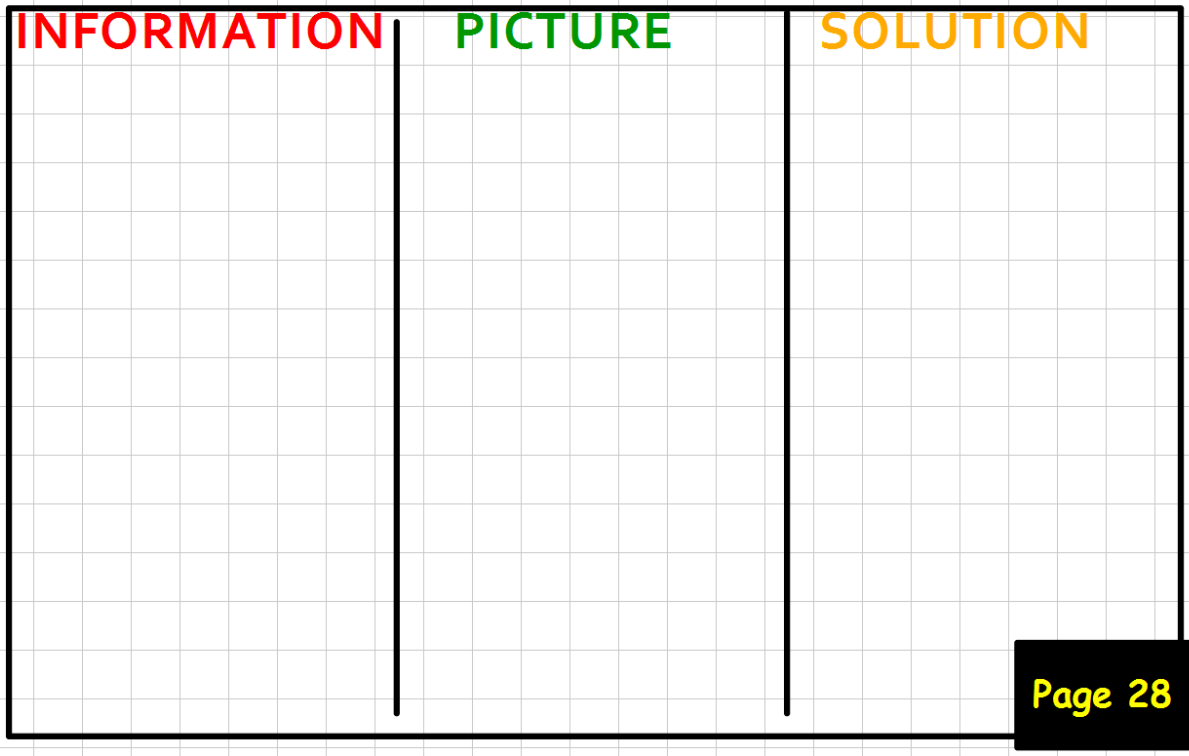
-2 ● -4 =

48 ÷ -8 =

$$\frac{-36}{9}$$

Example: Karen runs for the track team. If she ran the same distance, 4 miles, each day for four days this week, how far did Karen run?

What does this look like?



Practice #1

A person has a debt of $200. Five friends offer to pay off all of the debt. How much does each person need to pay in order to pay off the debt?

What does this look like?

INFORMATION	PICTURE	SOLUTION

Practice #2

Mrs. Fields needed 32 dollars to fill up her gas tank. She withdrew seven times that amount. How would this be represented in her bank account?

What does this look like?

INFORMATION	PICTURE	SOLUTION

Practice #3

A scuba diver is swimming at a depth of -12 feet. Then she dives down to a coral reef that is at five times this depth. What is the depth of the coral reef?

What does this look like?

INFORMATION	PICTURE	SOLUTION

Plickers

1) -4(-18)

2) -8 x 9

3) 12/2

4) $\frac{-64}{8}$