What's Going On?

Checking In	Some Reminders
Minds on	Back to Basics
Action!	Whiteboards
Consolidation	Mastering Integers

Learning Goal - I will be comfortable with basic integer addition, subtraction, multiplication and division.

Checking In

Required Materials

By Monday you **need to have**:

- a pencil
- paper
- a ruler
- a SEPARATE binder for this course
- a SCIENTIFIC CALCULATOR

EVERY DAY

Materials Check

Pencil

Eraser

Binder

Paper to write on

Scientific Calculator

Notes from yesterday

Overall level of organization

Checking In

Course Website

gilbertmath.com

All lessons

Assignments

Important Dates

Course Overview

Minds on

Back to Basics

Multiplying Two Integers

(+4) x (+3)	(+6) x (-1)	(-2) x (+5)	(-2) x (-3)
= 12	= −6	= −10	= +6

Minds on

Back to Basics

Multiplying Two Integers

If we are multiplying **two positive** integers, the result will be positive.

If we are multiplying **two negative** integers, the result will be positive

If we are multiplying **one positive** and **one negative** integer, the result will be negative.

When multiplying two integers:

If the numbers have the same sign(++ or - -), the result is: positive

If the numbers have different signs (+ -), the result is: negative

It's bad to be different

↓

negative

Minds on

Back to Basics

Dividing Two Integers

The rules are the same as for **multiplying** two integers...

(+8) ÷ (+4)	(+6) ÷ (-1)	(-10) ÷ (+5)	(-6) ÷ (-3)
$= \frac{8}{4}$	$= -6$	$= -2$	$= +2$
$= 2$			

Minds on

Back to Basics

Dividing Two Integers

If we are dividing **two positive** integers, the result will be positive.

If we are dividing **two negative** integers, the result will be positive.

If we are dividing **one positive** and **one negative** integer, the result will be negative.

Minds on

Back to Basics

Multiplying OR Dividing Two Integers

Basically, if the signs are:

THE SAME → **POSITIVE**

DIFFERENT → **NEGATIVE**

Minds on

Back to Basics

Multiplying Several Integers

multiplication

$(+1)(+2)(+3)(+4)$

$= (+2)(+3)(+4)$

$= (+6)(+4)$

$= +24$

$(+1)(-2)(+3)(+4)$

$= (-2)(+3)(+4)$

$= (-6)(+4)$

$= -24$

$(+1)(-2)(-3)(+4)$

$= (-2)(-3)(+4)$

$= (+6)(+4)$

$= +24$

$(+1)(-2)(-3)(-4)$

$= -24$

$(-1)(-2)(-3)(-4)$

$= +24$

$(-1)(-2)(-3)(-4)(-5)$

$= (+2)(-3)(-4)(-5)$

$= (-6)(-4)(-5)$

$= (+24)(-5)$

$= -120$

Minds on

Back to Basics

Multiplying Several Integers

Count up the negative signs

If there are an even number of negatives,

the result is positive.

If there are an odd number of negatives,

the result is negative.

Action!

Whiteboards!

We will be using the whiteboards quite a bit! They're awesome!

They come with a few rules...

1. Don't 'doodle' on them.

   It wastes the markers and generally means you aren't paying attention.

2. Clean them between answers and at the end. Mrs. High and I are not responsible for cleaning up after you.

$+(-7)+(-4)$

$=-7-4$

$=-11$

When we add a negative,
we subtract!

$$(4) + (-13)$$

$= 4 - 13$

$= -9$

$+9 \quad -17$

When we add a negative,
we subtract!

$$(-3) - (9)$$

$= -3 - 9$

$= -12$

Just drop the brackets and subtract!
When we start with negative and THEN subtract, our answer will be MORE NEGATIVE

$$(-2) - (-16)$$

$$= -2 + 16$$

$$= +14$$

When we subtract a negative,
we ADD!!!

$$-2 \times -7$$

$$= +14$$

When we multiply two negative numbers, the result is ALWAYS positive!

$$7 \times (-2)$$

$= -14$

When we multiply a positive and a negative, the result is ALWAYS negative.

$$24 \div -8$$

$= -3$

If you divide a positive and a negative, the result is ALWAYS negative!

$$\frac{-15}{5} = -3$$

If you divide a negative and a positive, the result is always negative!

$$-6 + (-7) - 3$$

$= -6 - 7 - 3$

$= -13 - 3$

$= -16$

~~-14~~ ~~-11~~ ~~-10~~ ~~$+10$~~ -16 ~~-4~~

First deal with (get rid of) the brackets.

Now just add and subtract from left to right!

$$11 - (-2) - 6 + 1$$

$= 11 + 2 - 6 + 1$

$= 13 - 6 + 1$

$= 7 + 1$

$= 8$

First deal with (get rid of) the brackets.

Now just add and subtract from left to right!

$$-6 - 10 - (-12)$$

$= -6 - 10 + 12$

$= -16 + 12$

$= -4$

$+28$ 16 ~~+4~~ ~~-28~~ -4

First deal with (get rid of) the brackets.

Now just add and subtract from left to right!

$$(-2)(-2)(-3)$$

$= -12$

When we multiply several integers together, we get a NEGATIVE when we have an ODD number of negative signs!

Consolidation

Mastering Integers

We will have two "mastery" tests.

These will test your ability to perform basic operations on integers.

The first one is practice, the second one counts for marks. (unless your first one is bettah)

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