

Integers Unit Study Guide

Objective	Resources	Mastered It(check mark)	Need More Practice (check mark)
Master Addition and Subtraction of Integers with high speed of execution. (Gr. 7 review)	Watch Addition/Subtraction Video Assessment: Complete Quiz		
Multiply integers using integer tiles and be able to draw out the process or represent it using actual tiles.	Watch Multiplying with Tiles Video page 290 (1-4) page 291 (#5-13) Assessment: No Online Quiz....prove to Mr. M you know how to do it		
Divide integers using integer tiles and be able to draw out the process or represent it using actual tiles.	Watch Division using Tiles Video page 303/304 (#1-8, #12, #15) Assessment: No online Quiz...Prove to Mr. M that you know how to do it.		
Generalize and apply a rule for determining the sign of the <u>product</u> and <u>quotient</u> of integers without using the integer tiles.	Watch Multiplying/Dividing Integer Video Multiplication (pgs 296-298 #1-11, #17-22) Division (pg 309-311 #1-10,#18) Assessment: Online Multiplication/Division Quiz		
Solve a given problem involving the <u>division</u> and multiplication of integers (2-digit by 2-digit) <u>with</u> the use of technology.	Make up 2 digit x 2 digit questions and show me that you know how to multiply and divide them on your calculator.		
Solve a given equation involving integers, taking into consideration <u>order of operations</u> (BEDMAS).	Watch BEDMAS Video page 314,315 (#1-7) Assessment: Online BEDMAS quiz		
Solve word problems related to debt, spending and savings using integers and random topics.	Watch Word Problem Video 1 and Debt/Savings Video page 297 12-15 page 305 #9, 10, 11, 14,16 page 311 #15 page 316/317 (#14,15, 17, 18,19, 23) Assessment: Word Problem Quiz 1		
Solve word problems related to calculating the <u>average (mean)</u> of a list of integers.	Watch "Averaging Integers" online video. page 315,316 #8-13 Page 317 #22 Assessment: Averaging Integers Online Quiz		
Solve word problems that involve objects ascending and descending.	Watch Word Problem 1 Video page 292 #14-17 page 299 (Mathlink Question in green box about weather balloons) Page 310 #12-14 page 316 (#15,16) Assessment: Ascending/Descending Word Problem Quiz Online		
Create situations and word problems that involve multiplying and dividing integers.	Projects....see next page.		
Review	pages 318-321 Also Review All Practice Tests Online		

Project

Complete the following project

- Create a word problem and present the solution in a Youtube video tutorial, a comic book, song or chart. You may also use other creative ideas as long as it is approved by Mr. Melhem first. Your project topic must involve either an "Ascending/Descending Situation", "Debt and/or Savings Situation" or "Budgeting Situation". It must include strong evidence of either Multiplication and/or Division built into the solution. Use the word problems from the classroom, videos or textbook to help generate some possible topic ideas.
- Please note that it cannot be a simple problem that is written on a piece of paper and submitted. You must provide evidence of deep thinking in a professionally polished format.

Grading For This Unit

Mr. M's Online Quizzes (All work must be shown on a separate sheet of paper) (20%)

3 In Class Quizzes

Quiz 1: Multiplying and Dividing Integers (10%)

Quiz 2: BEDMAS (10%)

Quiz 3: Word Problems (10%)







1 Project(15%)

Unit Test (35%)

January →

26	27	28	29	30	31
Start Integers	Review Adding/ Subtracting Integers	Multiplying Using Tiles	Dividing Using Tiles	Multiplying/ Dividing Without Tiles	

Sunday Monday Tuesday Wednesday Thursday Friday Saturday

February 2015						
1	2 BEDMAS	3 Multiplication Division Quiz 	4 Word Problems	5 BEDMAS Quiz 	6 BEDMAS Quiz  Math 8B Word Problems	7
8	9 Word Problems 	10 Word Problems	11 Word Problem Quiz 	12 Word Problem Review	13 Word Problem Review	14
15	16 Integer Unit Test	17 Integer Project Due 	18	19	20	21
22	23	24	25	26	27	28
Notes:						

Math - Problem Solving : Math Project Name Goes

Here: _____

Teacher Name: **Mr. Melhem**

Student Name: _____

CATEGORY	4	3	2	1
Mathematical Concepts	Explanation shows complete understanding of the mathematical concepts used to solve the problem(s).	Explanation shows substantial understanding of the mathematical concepts used to solve the problem(s).	Explanation shows some understanding of the mathematical concepts needed to solve the problem(s).	Explanation shows very limited understanding of the underlying concepts needed to solve the problem(s) OR is not written.
Mathematical Reasoning	Uses complex and refined mathematical reasoning.	Uses effective mathematical reasoning	Some evidence of mathematical reasoning.	Little evidence of mathematical reasoning.
Mathematical Errors	90-100% of the steps and solutions have no mathematical errors.	Almost all (85-89%) of the steps and solutions have no mathematical errors.	Most (75-84%) of the steps and solutions have no mathematical errors.	More than 75% of the steps and solutions have mathematical errors.
Explanation	Explanation is detailed and clear.	Explanation is clear.	Explanation is a little difficult to understand, but includes critical components.	Explanation is difficult to understand and is missing several components OR was not included.
Mathematical Terminology and Notation	Correct terminology and notation are always used, making it easy to understand what was done.	Correct terminology and notation are usually used, making it fairly easy to understand what was done.	Correct terminology and notation are used, but it is sometimes not easy to understand what was done.	There is little use, or a lot of inappropriate use, of terminology and notation.