

MATHEMATICS 8: ODYSSEY Unit 1 overview

Unit 1: Fractions and Rational Numbers

Review: lowest common multiple, greatest common factor, equivalent fractions, improper fractions, mixed numbers	-handout
Rational Numbers	-handout (fill in the blank) -MathMakeSense9: pg 101-103: #7-11, 15-18, 23, 24
Integers	-handout
Adding and subtracting fractions, integers	-handout -MMS9: pg 111 #3-5, 9, 11abcd, 13bc, 18 pg 119 #5, 8, 9
Multiplying fractions, integers: modelling + practice	-handout -MMS9: pg 127 #7, 9, 11, 12, 15
Dividing fractions, integers: modelling + practice	-MMS 9: pg 134 #3, 4, 12, 13, 17
Order of operations	-MMS 9: pg140 #4, 7, 10, 11
Review-no calculator	
Test-no calculator	

Unit 1.1: Review

A) Review common vocabulary found in fractions and rational numbers

i) factors:

ii) greatest common factor (GCF):

-how to find the GCF?

-how can we use this to reduce fractions to lowest terms?

Try:

iii) multiples

iv) lowest common multiple (LCM)

-how to find LCM?

-how can we use this to help find lowest common denominator?

Try:

v) Equivalent fractions

-do handout: part A #1-6, 13
part B #1-6, 23
part D #1-4

Unit 1.2 Basics continued + Rational Numbers

A) More vocabulary

i) improper fraction:

ii) mixed fraction:

B) How to change from mixed number to improper fraction?

C) How to change from improper fraction to mixed number?

-handout: part E: #1-10, 16-25, 32ab

-Rational Numbers handout: use Math Makes Sense 9 to help you do it.

A) What are rational numbers?

-any number that can be written as a fraction with an integer numerator and a non-zero integer denominator.

ie: $\frac{m}{n}$, where 'm' and 'n' are integers, and $n \neq 0$

-can have decimals that terminate or repeat

ex: rational numbers:

ex: not rational numbers:

B) How can we show rational numbers on a number line?

C) How can we tell which rational number is bigger or smaller?

-place values (if comparing decimals)

-look at numerator if equivalent fractions

D) How do I write a negative fraction?

Do: handout

-pg 101-103 #7-11, 15-18, 23,

Math 8 Odyssey: Unit 1.4a: Integers

July 19, 2015

A) What are they?

-positive and negative whole numbers

Ex:

B) What do they mean?

C) How to add integers?

D) How to subtract integers?

-handout

-quiz next day (add/subtract integers)

Unit 1.4b: Adding/subtracting Rational Numbers

July 19, 2015 3:47 PM

A) How to do it?

-use same ideas of adding/subtracting fractions and positive/negative numbers

*use common denominators!!

Ex:

-MMS9: pg 111 #3-5, 9, 11abcd, 13bc, 18
pg 119 #5, 8, 9

Unit 1.5 Multiplying and Dividing Integers

A) How to multiply integers?

-see the pattern?

-what about:

Rule:

B) What if I have to show it on a number line?

C) How do I divide integers?
-same rules!

Unit 1.6: Multiplying Fractions

July 19, 2015 4:41 PM

A) What does it mean?

$$\text{Ex: } 3 \times \frac{4}{7}$$

-as a model:

$$\text{Ex: How to do: } \frac{3}{5} \times \frac{1}{4}$$

Ex: How to do:

Ex: How to do:

B) Do the integer rules apply to rational numbers?
-yes!

Unit 1.7: Dividing Fractions

July 20, 2015 5:28 PM

A)

-do: MMS9: pg 134 #3, 4, 12, 13, 17

Unit 1.8: Order of Operations (BEDMAS)

July 20, 2015 5:54 PM

In your group, use your electronic device to fill in the blanks:

The person or culture who invented the order of operations was _____.

In Canada, we call it _____. The U.S. calls it _____, while the U.K. and Australia uses the acronym _____.

Since we are in Canada, we will use the acronym _____ in class. Each letter in the acronym stands for mathematical procedure, so:

B= _____
_ = exponents
_ = _____
_ = _____
_ = _____
_ = _____

Please note that though some of the letters come before others, it is slightly misleading. For example, in the question: $10-3+2 =$ _____ and not _____ even though _____ comes before _____ in the acronym.

Try:

Do:

Math 8 Odyssey Unit 2: Fractions/Decimals/%

Thursday, June 25, 2015 3:36 PM

Unit 2: fractions/decimals/%

Relationship between fractions, decimals and %	MMS8: pg 239 #6, 7, 9, 12, 14, 18ab, 20, 21
% problems(pyramid), sales tax	MMS8: pg 252 #3,4,7,9 pg 260 #4, 6, 11, 12, 13
% problems in reality	-newspaper ads, glue, scissors
Commission	-smartphone/tablet
Ratios	-MMS8: pg 267: #4, 5, 8, 10 pg 274 #5, 7, 8, 10 pg 291 #4, 6, 7, 10, 13
rates	MMS8: pg 298 #5-7, 8 pg 303 #6, 8, 11, 16
Review	
Test	