

Math Makes Sense 7

Chapter: 2: Integers – Yes, you CAN do this!

Definition: An INTEGER is ... _____
_____.

NB: When working through the assigned exercises and activities, you should check ALL your answers using the answer guide at the back of the book. Do **NOT** proceed to the next set of questions until you have corrected the section you are working on. I.e.: Do not wait to correct your answers till you have finished the whole page of assigned questions. When you are stuck or not getting something go back and **re-read** the notes and examples till you understand the concept.

Key Words: page 51. Either now or as you work through this chapter, define, illustrate or give an example of each word or idea.

Negative integer:

Positive integer:

Zero pair:

Opposite integers:

Start by taking the **Practice Test** on Pg. 81. When done, calculate your %.

Topic: 2.1 Representing Integers

Read and study pages: 52 + 53

Give special attention to: the idea of **zero pairs**.

Also notice the use of **BRACKETS** when working with Integers. These are **organizational** brackets. Notice how the signs for the **VALUES** of positive (+) and negative (-) are the same as for the **OPERATIONS** of addition (+) and subtraction

(-). We use brackets to avoid confusion between the **VALUES** and the **OPERATIONS**. So, we bracket the integers.

Practice Q's: 1, 2 by yourself. Now, find a partner and complete Q's 3 to 7.

Topic: 2.2 Adding Integers With Tiles. (This is all about changing the way you think)

As you work through this abstract idea, start to move away from thinking about adding and subtracting in the traditional sense. Start to “adjust” your thinking to the ideas of:

Combining: put all your numbers, both negative and positive together. Think of them as opposites. (notice this key word –“COMBINE” -in the top line of pg. 66.

Neutralizing (creating zero pairs): line up the pairs of positives and negatives.

Remove them from the area.

Cleaning-up: What is left over after removing the zero pairs?

Read and study pages: 56-57

Give special attention to: the idea of **zero pairs** again.

Basic Assignment: Practice Qs: pg 58-59. Do Q's -1 to 8.

Assessment Focus: Work with a partner who has finished the Practice. Choose two of Q's 9 to 12.

Topic: 2.3 Adding Integers on a Number Line

Read and study pages: 60 to 62.

Give special attention to: opposite integers. Remember that on a number line, no matter where you start from, travelling:

to the **right** is positive, to the **left** is negative.

Practice: Qs: 1 to 8.

Assessment Focus: Q's 9 to 11.

Getting ready to do battle: its time for Integer war. Remember the axiom: Bigger Wins. In the battle of VALUES, BIGGER wins EVERY time!!!!

Mid Unit Review, pg 65 (Getting ready for your Mid Unit Quiz)

Topic: 2.4 Subtracting Integers with Number Tiles (Changing the way you think – again!)

Read and study pages: 66 to 68

Give special attention to: the first 3 lines on top of pg 66, especially the word “REMOVE”. The tricky situations will be when you have to “remove” tiles that you don't have in your space. This is when you have to add in enough ZERO PAIRS until you DO have enough tiles to remove.

Practice Q's: Pg 69, Q's 1 to 8.

Assessment Focus: pg. 69, 70. Work with a partner who has finished the Practice. Choose two of Q's 9 to 14.

Topic: 2.5 Subtracting Integers on a Number Line

Read and study pages: 71 to 73.

Give special attention to: Subtraction means “finding the DIFFERENCE”

Practice Q's: Pg 73, 1 to 7

Assessment Focus: pg. 75. Work with a partner who has finished the Practice. Choose three of Q's 8 to 12.

Now, after all this, and your brain is fried, you find out the short-cut –the “cheat” –to subtracting integers. It is simply this:

To subtract an integer, you do a flip-flop. Instead of subtracting, you will cheat a bit and change it to ADDITION – this is the FLIP.

Now FLOP the sign on the second number to its opposite value.

Now you are ready to **Combine, Neutralize** and **Clean-up**, like you do for any ADDITION.

So, how do we subtract? Well, you can change the way you think, and simply

ADD the INVERSE or ADD the OPPOSITE

Unit Review, pg 79, 80.

Practice Test: Finish by taking the Practice Test on Pg. 81. When done, calculate your %.

Now you are ready for your Chapter Test. **No Calculators** for this test.