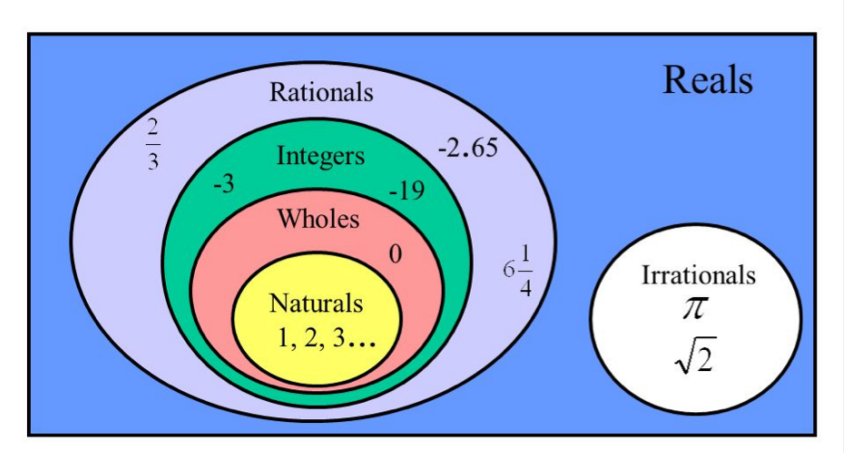
Date: _____

Unit 1: Number Sense

Day 1: Operations with Integers

1) Types of Numbers



In your own words, explain what an **integer** is. How is the set of integers different from the set of natural numbers? Whole numbers?

2) Operations with Integers

a) Multiplication and Division

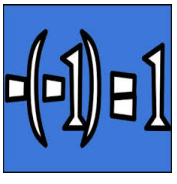
Try each of the following on your calculator:

(-3) x (-4) 3 x 4 (-3) x 4 3 x (-4)

16 ÷ 2 (-16) ÷ 2 16 ÷ (-2) (-16) ÷ (-2)

When you multiply or divide two integers with the same sign (both positive or both negative), what sign do you expect your answer to have?

When you multiply or divide two integers with opposite signs (one positive, one negative), what sign do you expect your answer to have?



b) Addition and Subtraction

What are some tools that you have used to add and subtract integers?

Complete each of the following using a tool of your choice.

i) -7 + (-1) ii) 1 + (-4) iii) -3 + 5

When you are adding integers, what can you do to predict the sign of your answer?

I am going to ask you to show me when you "combine double signs". What do you think this means? For example, if I asked you to show your work for (-10) - (-8) by combining double signs, what would you write?

Why does this simplify the process of adding and subtracting integers?

Complete each of the following. Show your work by combining double signs.

i) -6 - (-5) ii) 12 + (-18) iii) 1 - (-3) + (-8)

3) Applying Integers to Real Life

You borrow $40 from your brother to buy your friend a gift. When you pay him back, he asks if he can borrow an additional $15 to buy some new jeans. Write an addition statement to model the situation.

If he pays you back $8, how much does he still owe you?