Goal:

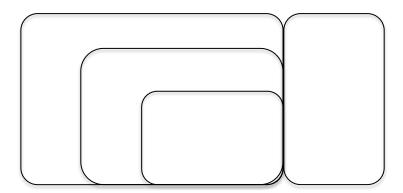


Warm up: Complete each mathematical sentence and then provide two examples.

- a. odd + odd = _____, e.g. ____
- b. even + even = _____, e.g. _____
- c. odd + even = _____, e.g. _____
- d. fraction + fraction = _____, e.g. _____
- e. Create your own:

I. Classifying Real Numbers

- a. Whole numbers: _____
- b. Integers:
- c. Rational numbers:
- d. Irrational numbers:
- e. Real numbers: ______



Classify each number as specific as possible.

- 1. -23
- 2. 33.4 3. $\sqrt{17}$
 - 4. 1.025
- 5. 0.4

II. Divisibility Rules

When dividing an integer by an integer, there are ways to determine in one will divide evenly into the other.

Number	Rule	Examples
2		
3		
4		
5		
6		
8		
9		
10		

Test to see which if the numbers on the left are divisible by the top. If so, place a check in the box $\frac{1}{2}$

	2	3	4	5	6	8	9	10
789								
12,120								
360								
987,654								
6,230								
48								
59,940								
255								
552								
525								
3,560								

III. Properties of Real Numbers

Property	Addition	Multiplication	Does not work for
C			
C			
A			
I			
I			
D			

Identify the property that is being used.

1.
$$2(3-8)=2\cdot 3-2\cdot 8$$

1.
$$2(3-8)=2\cdot 3-2\cdot 8$$
 2. $5+\left(3+\frac{1}{2}\right)=\left(5+3\right)+\frac{1}{2}$ 3. $\left(72+a\right)+3=3+\left(72+a\right)$

3.
$$(72+a)+3=3+(72+a)$$

4.
$$-3+3=0$$
 5. $-3\left(-\frac{1}{3}\right)=1$ 6. $x(x+3)=x^2+3x$ 7. $5+0=5$

6.
$$x(x+3)=x^2+3x$$

7.
$$5+0=5$$

8.
$$8(1) = 8$$

8.
$$8(1)=8$$
 9. $13\left(\frac{1}{13}\right)+0=0+13\left(\frac{1}{13}\right)$ 10. $3(x+4)=3(4+x)$

10.
$$3(x+4)=3(4+x)$$