



Name _____

Per _____

Algebra 1 CP Class Log: Background Skills

Expressions, Equations, and Inequalities

#	Date	Title	Self Check & Teacher Check
1.		Signed Syllabus	1.
2.		Notes: 0-1 Simplifying and Evaluating Expressions	2.
3.		Handout: Finish work	3.
4.		0-1 Walk About: Error Correction	4.
5.		Notes: 0-2 Opposites & Reciprocals	5.
6.		Handout: 0-2 Finish work	6.
7.		Notes: 0-3 Number Sense	7.
8.		Handout: Finish Work	8.

Quiz 0.1-3

9.			9.
10.			10.
11.			11.
12.			12.

Key: Stamp/ ✓ = Full credit L(ate)/i(ncomplete) = ½ credit ?/x/blank = 0 credit

Alg 1
0-1 Evaluating & Simplifying

Name _____
Date _____ **A#2-3**

Goal:



Order of Operations

G
E
M
D
A
S

Key Words:

Example 1: Simplify the expression.

$$8(5 + 30 \div 5)$$

Pair-Share

$$8 + 3(4 + 3)$$

Simplify each expression.

1. $4 + 6(8)$

2. $\frac{4(8 - 2)}{3 + 9}$

3. $4 \times 3^2 + 2$

4. $40 \div 5(2)$

5. $2.7 + 3.6 \times 4.5$

6. $3[4(8 - 2) + 5]$

7. $4 + 3(15 - 2^3)$

8. $17 - [(3 + 2) \times 2]$

9. $6 \times (3 + 2) \div 15$

Alg 1
0-1 Evaluating & Simplifying

A#2-3

Example 2: Evaluate each expression for $a = 2$ and $b = 6$.

$$2(7a - b)$$

Pair-Share:

$$\frac{5a + 2}{b}$$

Evaluate each expression.

10. $\frac{a + 2b}{5}$ for $a = 1$ and $b = 2$

11. $\frac{5m + n}{5}$ for $m = 6$ and $n = 15$

12. $x + 3y^2$ for $x = 3.4$ and $y = 3$

13. $7a - 4(b + 2)$ for $a = 5$ and $b = 2$

More Practice

Simplify each expression.

14. $\frac{100 - 15}{9 + 8}$

15. $\frac{2(3 + 4)}{7}$

16. $\frac{3(4 + 12)}{2(7 - 3)}$


23. $7(9 - 5)$

24. $2(3^2) - 3(2)$

25. $4 + 8 \div 2 + 6 \times 3$

Algebra 1
0-2 Opposites & Reciprocals

Name _____
Date _____ **A#4-5**

Goal:		
Key Words:		
Absolute Value:		
Opposite:		
Reciprocal:		
Counterexample:		
Absolute Value	Opposite	
Ex 1 Simplify the following a. $ 18 $ b. $ -22 $ c. $ \frac{2}{3} $ d. $ 0.52 $	Ex 2 Find the opposite of each expression. a. 12 b. -23 c. $x+3$ d. $-2a-7$	
Practice: Simplify each expression. 1. $ -123 $ 2. $ -2.24 $ 3. $ \frac{10}{3} $ 4. $ 0.2 $	Practice: Find the opposite of each expression. 5. -99 6. 2.45 7. $v-7$ 8. $-3t+10$	

Compare & Contrast: Use a Double Bubble Map to compare *absolute value* and *opposite*.

Reciprocal	Counterexample
<p>Ex 3 Find the reciprocal of the following:</p> <p>a. $-\frac{2}{3}$ b. 20 c. 1.4 d. $2\frac{1}{5}$</p>	<p>Ex 4 Provide a counterexample for each statement:</p> <p>a. All birds can fly.</p> <p>b. All numbers are even.</p> <p>c. All positive integers are divisible by 2 or 3.</p>
<p>Practice: Find the reciprocal of each expression.</p> <p>9. $\frac{4}{11}$ 10. 15 11. 3.4 12. $4\frac{1}{2}$</p> <p>13. $\frac{1}{x}$ 14. $\frac{a}{a+4}$ 15. $7\frac{2}{3}$ 16. 6.2</p>	<p>Practice: Find the opposite of each expression.</p> <p>17. All multiples of 3 are odd.</p> <p>18. No negative number is less than its absolute value.</p> <p>19. A number added to itself is always greater than then number.</p> <p>20. The reciprocal of a number is always smaller than the number.</p>

21. What is the *opposite reciprocal* of the following?

- a. $\frac{2}{3}$ b. -20 c. $-\frac{1}{4}$ d. $\frac{x}{x+4}$ e. 3.6 f. $-2\frac{1}{3}$



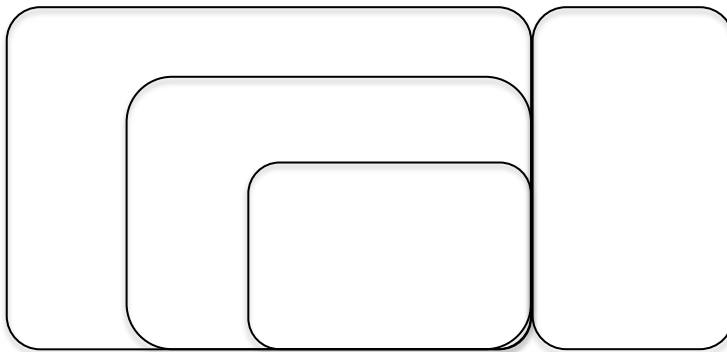
Goal:

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. $0.\overline{4}$

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

	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. $2(3-8)=2\cdot3-2\cdot8$ 2. $5+\left(3+\frac{1}{2}\right)=(5+3)+\frac{1}{2}$ 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. $5+0=5$

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