


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. $-2\frac{1}{3}$