

### 3.1a Homework: Naming Properties of Arithmetic

Complete the table below:

Identity Property of Addition: $a + 0 = a$	1a. Show the Identity Property of Addition with 2.17	1b. Show the Identity Property of Addition with $-3$
Identity Property of Multiplication: $a \cdot 1 = a$	2a. Show the Identity Property of Multiplication with 23	2b. Show the Identity Property of Multiplication with $-3b$
Multiplicative Property of Zero: $a \cdot 0 = 0$	3a. Show Multiplicative Property of Zero with 43.581	3b. Show the Multiplicative Property of Zero with $-4xy$
Commutative Property of Addition: $a + b = b + a$	4a. $4.38 + 2.01$ is the same as:	
	4b. $x + z$ is the same as:	
Commutative Property of Multiplication: $ab = ba$	5a. $\frac{5}{7} \cdot \frac{3}{8}$ is the same as:	
	5b. $6k$ is the same as:	
Associative Property of Addition: $(a + b) + c = a + (b + c)$	6a. $(1.8 + 3.2) + 9.5$ is the same as:	
	6b. $(x + 1) + 9$ is the same as:	
Associative Property of Multiplication: $(ab)c = a(bc)$	7a. $(2.6 \cdot 5.4) \cdot 3.7$ is the same as:	
	7b. $(wh)l$ is the same as:	
<i>Use the listed property to fill in the blank.</i>		
Multiplicative Inverse: $a \left(\frac{1}{a}\right) = 1$	8a. $3 ( \quad ) = 1$	
	8b. $\frac{1}{4} ( \quad ) = 1$	
Additive Inverse: $a + (-a) = 0$	9a. $\frac{5}{9} + \quad = 0$	
	9b. $\quad + -x = 0$	

Name the property demonstrated by each statement.

10.	$3 + -2 + 7 = 3 + 7 + -2$	
11.	$5 + (-5 + 4) + 6 = (5 + -5) + (4 + 6)$	
12.	$25 + (-25) = 0$	
13.	$(2/5)(5/2) = 1$	
14.	$(x + 3) + y = x + (3 + y)$	
15.	$2.37 \times 1.5 = 1.5 \times 2.37$	
16.	$1 \cdot mp = mp$	
17.	$9 + (5 + 35) = (9 + 5) + 35$	
18.	$0 + 6b = 6b$	
19.	$xy = yx$	
20.	$7x \cdot 0 = 0$	
21.	$4(3 \cdot z) = (4 \cdot 3)z$	
22.	$\frac{2}{3} \cdot 4.9 = 4.9 \cdot \frac{2}{3}$	
23.	$x + 4 = 4 + x$	