

### 3.1a Homework: Naming Properties of Arithmetic

Complete the table below:

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

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.	$(\frac{2}{5})(\frac{5}{2}) = 1$	
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.	$x + 4 = 4 + x$	