

Properties of Equality Practice Worksheet A

Name Key _____ Class Period _____

1. A football team is on the 35-yard line. The quarterback is sacked at the line of scrimmage. The team gains 0 yards. Which identity or property does this represent?

Explain. $35 + 0 = 35$ Identity Property of Addition

2. Identify the sentence that does not belong with the other three. Explain.

$$x+12=12+x$$

$$7h=h \cdot 7$$

$$1+a=a+1$$

~~$$(2j)k=2(jk)$$~~

The fourth box does not belong because it is using the associative property & not the commutative property.

3.	$9 \cdot 7 = 7 \cdot 9$	Commutative Property of Multiplication
4.	$2 \cdot (3 \cdot 4) = (2 \cdot 3) \cdot 4$	Associative Property of Multiplication
5.	$37 \cdot 0 = 0$	Multiplicative Property of Zero
6.	$1 \cdot 87 = 87$	Identity Property of Multiplication
7.	$14 + 6 = 6 + 14$	Commutative Property of Addition
8.	$3(6a) = (3 \cdot 6)a$	Associative Property of Multiplication
9.	$2b + 0 = 2b$	Identity Property of Addition
10.	$55 + 6 = 6 + 55$	Commutative Property of Addition
11.	If $2^4 = 2^x$ then $4 = x$	Exponential Property of Equality
12.	$(x+3)+y = x+(3+y)$	Associative Property of Addition
13.	$1 \cdot mp = mp$	Identity Property of Multiplication
14.	$9+(5+35) = (9+5)+35$	Associative Property of Addition
15.	$6b + 0 = 6b$	Identity Property of Addition
16.	$7x \cdot 0 = 0$	Multiplicative Property of Zero
17.	$4(3 \cdot z) = (4 \cdot 3)z$	Associative Property of Multiplication
18.	If $4^x = 4^5$ then $x = 5$	Exponential Property of Equality.