G3-M3-Lesson 16

1. Let $g = 4$. Determine whether the equations are true or false.

a.	$g \times 0 = 0$	*True*
b.	$0 \div g = 4$	*False*
c.	$1 \times g = 1$	*False*
d.	$g \div 1 = 4$	*True*

> I know this equation is false because 0 divided by any number is 0. If I put in any value for g other than 0, the answer will be 0.

> I know this is false because any number times 1 equals that number, not 1. This equation would be correct if it was written as $1 \times g = 4$.
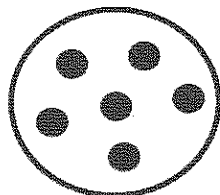
2. Elijah says that any number multiplied by 1 equals that number.

    a. Write a multiplication equation using c to represent Elijah's statement.

    $1 \times c = c$

    > I can also use the commutative property to write my equation as $c \times 1 = c$.

    b. Using your equation from part (a), let $c = 6$, and draw a picture to show that the new equation is true.

    > My picture shows 1 group multiplied by c, or 6. 1 group of 6 makes a total of 6. This works for any value, not just 6.

EUREKA MATH   Lesson 16:   Reason about and explain arithmetic patterns using units of 0 and 1 as they relate to multiplication and division.   23

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