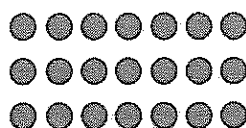## G3-M3-Lesson 1

1. Write two multiplication facts for each array.

> This array shows 3 rows of 7 dots, or 3 sevens. 3 sevens can be written as $3 \times 7 = 21$. I can also write it as $7 \times 3 = 21$ using the commutative property.

$$\underline{21} = \underline{3} \times \underline{7}$$

$$\underline{21} = \underline{7} \times \underline{3}$$

2. Match the expressions.

a. 4×7 6 threes

b. 3 sixes 7×4

> The commutative property says that even if the order of the factors changes, the product stays the same!

3. Complete the equations.

a. $7 \times \underline{2} = \underline{7} \times 2$

$$= \underline{14}$$

> This equation shows that both sides equal the same amount. Since the factors 7 and 2 are already given, I just have to fill in the unknowns with the correct factors to show that each side equals 14.

b. 6 twos + 2 twos = $\underline{8} \times \underline{2}$

$$= \underline{16}$$

> This equation shows the break apart and distribute strategy that I learned in Module 1. 6 twos + 2 twos = 8 twos, or 8×2. Since I know $2 \times 8 = 16$, I also know $8 \times 2 = 16$ using commutativity. Using commutativity as a strategy allows me to know many more facts than the ones I've practiced before.