



Name _____

Date _____

Algebraic Thinking: Making 10



The following review will help you learn basic algebraic thinking using multiplication fact families. Read the definitions below and review the examples. Then, complete the problems that follow.

Associative Property

When you multiply three or more numbers, you will get the same product regardless of the grouping of the factors.

Example: $(2 \times 3) \times 4 = 2 \times (3 \times 4)$

Commutative Property

When you multiply two or more numbers, you will get the same product regardless of the order that you multiply the factors.

Example: $5 \times 9 \times 4 = 4 \times 5 \times 9$

Distributive Property

When you multiply two or more numbers, you can decompose one factor into two smaller factors. Then, find the sum of the new multiplication facts.

Example: $3 \times 9 = (3 \times 5) + (3 \times 4)$

Identity Property

When you multiply any number by one, you will get that number.

Example: $8 \times 1 = 8$
 $1 \times 8 = 8$

There are many different ways of making 10 using multiplication and addition. Complete the problems below. The first has been completed for you.

$$2 \times \boxed{5} = 10$$

$$(2 \times 3) + \boxed{} = 10$$

$$\boxed{} \times 2 = 10$$

$$(2 \times 2) + \boxed{} = 10$$

$$1 \times 5 \times \boxed{} = 10$$

$$1 \times \boxed{} = 10$$

$$\boxed{} \times 1 \times 5 = 10$$

$$\boxed{} \times 10 = 10$$