Properties of Multiplication Worksheet

Name: Date:

Find the prime factors of the numbers below using the factor tree method.
Draw a factor tree for each one, listing out all of the factors.

① Apply the associative property of multiplication to solve these problems:

A	B	C
$(2 \times 3) \times 4 =$	$5 \times (2 \times 3) =$	$(7 \times 2) \times 3 =$

② Use the commutative property of multiplication to rewrite and solve these problems:

A	B	C
$7 \times 6 =$ ___ $\times$ ___ $=$	$8 \times 3 =$ ___ $\times$ ___ $=$	$2 \times 9 =$ ___ $\times$ ___ $=$

③ Use the distributive property of multiplication to simplify these problems:

A	B	C
$3 \times (4 + 2) =$	$5 \times (6 + 3) =$	$2 \times (5 + 7) =$

④ Use the identity property of multiplication to solve these problems:

A	B	C
$9 \times 1 =$	$1 \times 6 =$	$5 \times 1 =$

⑤ Apply the zero property of multiplication to solve these problems:

A	B	C
$8 \times 0 =$	$0 \times 5 =$	$3 \times 0 =$