

# Thursday Homework

<p>Which example shows the zero product property?</p> <p>A. <math>a(b + c) = ab + bc</math>          B. <math>(a + b) + 9 = a(9 + b)</math>          C. <math>a + a + a = 3a</math>          D. <math>A(0)</math></p>	<p>Which example does NOT show the commutative property of addition?</p> <p>A. <math>4 + x = x + 4</math>          B. <math>ab = ba</math>          C. <math>a + b = b + a</math>          D. <math>3x + 4y = 4y + 3x</math></p>	<p>Customers at an ice-cream shop took a survey. The results showed that 144 customers rated the shop as being "very satisfactory." This number represented 45% of the total number of customers who took the survey.</p> <p>What was the total number of customers who took the survey? (Answer = 320)</p>
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Complete the table below to show an equivalent expression

ORIGINAL EXPRESSIONS	PROPERTY	EQUIVALENT EXPRESSION
$15 + 0$	Additive Identity	
$4 \cdot 6 \cdot 7$	Commutative Property of Multiplication	
$9 + (5 + 3)$	Associative Property of Addition	
$11 \cdot 1$	Multiplicative Identity	
$\frac{1}{4} \cdot \frac{4}{1}$	Multiplicative Inverse	
$9 + (-9)$	Additive Inverse	

A worker at a clothing company uses 200 buttons to make 50 shirts. At this rate, how many buttons would the worker use to make 350 shirts? (Answer is 1,400)

<p>Every day after school, Jenna rides her bicycle to her home, which is a distance of 4.2 kilometers. What are 3 different ways I can set up the proportions to solve this problem?</p>	<p>Caroline saved \$3.84 on a discounted item that was marked down 15% off the original price of the item. What was the original price of the item before the discount? (Answer is \$25.60)</p>	<p>A cookie recipe calls for <math>2\frac{1}{4}</math> cups of flour and <math>1\frac{1}{2}</math> cups of sugar. If the amount of the ingredients are increased proportionally and the amount of sugar was increased to 9 cups, how many cups of flour would be needed? (Answer 13.5 cups of flour)</p>
<p>What is the prime factorization of 180?</p>	<p>The prime factorization is <math>3^2 \cdot 5^2</math>; What number does this describe?</p>	<p>What is the prime factorization of 80?</p>
<p>Frank had \$65. He spent \$2 per day for 7 days. Then he was given \$9 to divide equally between himself and his 2 brothers. The following expression can be used to find the amount of money Frank had after that.</p> $65 - 2 \cdot 7 + 9 \div 3$ <p>Based on this expression, what is the amount of money Frank had remaining?</p>	<p>What is the prime factorization of 110?</p>	<p>What is the value of the expression shown below?</p> $12 + 96 \div 3 \cdot 2^3$