

Math 6 - Unit 3: Expressions

End of Unit Study Guide



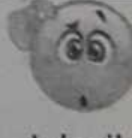
Name: Key

Class Period: 1 2 3 4 Date: _____

<p>1) What is the number that multiplies a variable, such as the "9" in the term "9x"?</p> <p><u>Coefficient</u></p>	<p>2) Write in exponential form:</p> <p>$7 \cdot 7 \cdot 7 \cdot 7 \cdot 7$</p> <p><u>$7^5$</u></p>	<p>3) Write an expression for "12 more than a number."</p> <p><u>$n + 12$</u></p>
<p>4) Apply the distributive property to simplify the expression:</p> <p>$12(5x + 3)$</p> <p><u>$60x + 36$</u></p>	<p>5) Which expression is equivalent to $30x + 5$?</p> <p>A. $6(5x + 1)$ B. $5(6x + 5)$ <input checked="" type="radio"/> C. $5(6x + 1)$ D. $30(x + 5)$</p>	<p>6) Write an expression for: "nine less than x squared."</p> <p><u>$x^2 - 9$</u></p>
<p>7) Identify each part of the expression $4n + 15$.</p> <p>4 <u>coefficient</u> n <u>variable</u> 15 <u>constant</u></p>	<p>8) Write an example of the commutative property.</p> <p>$4 + 9 = 9 + 4$ $3 \cdot 7 = 7 \cdot 3$</p>	<p>9) Which expression is NOT equivalent to the others?</p> <p>A. $7(6 + 9)$ B. $42 + 63$ C. $7 \cdot 15$ <input checked="" type="radio"/> D. $7(6) \cdot 7(9)$</p>
<p>10) Evaluate the expression $6s^2$ if $s = 2$. Show your work!</p> <p>$6 \cdot 2^2$ $6 \cdot 4$ 24</p> <p><u>24</u></p>	<p>11) Write "4 cubed" in expanded form AND evaluate.</p> <p><u>$4 \cdot 4 \cdot 4$</u> <u>64</u></p>	<p>12) What are like terms?</p> <p>Like terms are terms that have the same variable and exponent.</p>

<p>13) $(6^2 - 8 \div 4) + 27$ $(36 - 8 \div 4) + 27$ $(36 - 2) + 27$ $34 + 27$ 61 <u>61</u></p>	<p>14) Evaluate $n^2 + 4n + 4$ if $n = 7$. Show your work. $7^2 + 4 \cdot 7 + 4$ $49 + 4 \cdot 7 + 4$ $49 + 28 + 4$ 81 <u>81</u></p>	<p>15) Simplify the expression: $7(n + 3) + 12n$ $7n + 21 + 12n$ $19n + 21$ <u>$19n + 21$</u></p>
<p>16) Simplify the expression: $7n + 15n^2 + 13n - 14n^2$ $n^2 + 20n$ <u>$n^2 + 20n$</u></p>	<p>17) The expression $120 + 15n$ can be used to find the total price for n students to take a field trip to the science museum. Find the cost if $n = 3$ students to visit the science museum. $120 + 15 \cdot 3$ $120 + 45$ 165 <u>\$165</u></p>	<p>18) A family of four (2 adults and 2 kids) is going to the pumpkin patch. Regular admission is \$12 for adults and \$4 for kids. How much will they pay to get in? $(2 \cdot 12) + (2 \cdot 4)$ $24 + 8$ <u>\$32</u></p>

These are the skills you should understand to do well on the Unit 3 Test. Rate yourself on each one. This will help you figure out what to study!

Skill/Standard	 <u>I got this!!</u>	 <u>I understand this sometimes.</u>	 <u>I don't understand at all.</u>
Exponents #2, 11			
Order of Operations #10, 13, 14, 17, 18			
Evaluating using Substitution #10, 14, 17			
Translating Words to Expressions #3, 6			
Parts of Expressions #1, 7			
Combining Like Terms #12, 15, 16			
Distributive Property #4, 5, 9, 15			
Associative & Commutative Properties #8			