

Name: \_\_\_\_\_

**Homework #3**

Score = \_\_\_\_/20

Directions: Each day Thursday through Wednesday (not including weekends), there are 1-4 questions to complete for homework. You may complete the work in the space provided. If you choose to work on a separate sheet of paper, record your answer in the appropriate box, and staple your separate sheet of paper to this one. **To earn full credit, you must show some work when solving equations.**

\*\*IMPORTANT: Go to this link and insert your answers

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>T<br/>h<br/>u<br/>r<br/>s<br/>d<br/>a<br/>y</b> | <p>Which expression is equivalent to</p> $16 + 2 \cdot 36?$ <p><b>F</b> <math>2^4 + 2^3 \cdot 3^2</math></p> <p><b>G</b> <math>2^3 + 2^3 \cdot 3^2</math></p> <p><b>H</b> <math>2^4 + 2^2 \cdot 3^2</math></p> <p><b>J</b> <math>2^3 + 2^2 \cdot 3^3</math></p>                                                                                                                                                                | <p>Keith wrote the expression shown to determine the cost in dollars for an upcoming trip.</p> $(127.50 - 23.50) + 3(86.50 + 4)$ <p>Which expression is equivalent to the one Keith wrote?</p> <p><b>F</b> 107(90.50)</p> <p><b>G</b> 101(90.50)</p> <p><b>H</b> <math>104 + 3(90.50)</math></p> <p><b>J</b> <math>104 + 263.50</math></p> | <p>Leon wrote an expression that is equivalent to <math>(30 + 6) \div 12</math>. Which expression could be the one Leon wrote?</p> <p><b>A</b> <math>36 \div 3 \cdot 4</math></p> <p><b>B</b> <math>(3 \cdot 3 \cdot 4) \div 4 \cdot 3</math></p> <p><b>C</b> <math>5 \cdot 6 + 2 \cdot 3 \div 3 \cdot 2 \cdot 2</math></p> <p><b>D</b> <math>(3 \cdot 3 \cdot 2 \cdot 2) \div (3 \cdot 2 \cdot 2)</math></p> | <p>Mr. Gonzales showed students part of the prime factorization of 90. One factor is missing.</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <math>2 \cdot 3^2 \cdot \underline{\hspace{1cm}}</math> </div> <p>What number completes this prime factorization?</p> |
| <b>F<br/>r<br/>i<br/>d<br/>a<br/>y</b>             | <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><b>A</b> \$150</p> <p><b>B</b> \$54</p> <p><b>C</b> \$20</p> <p><b>D</b> \$444</p> | <p>What is the prime factorization of 110?</p> <p><b>F</b> <math>5^2 \cdot 11</math></p> <p><b>G</b> <math>2^5 \cdot 11</math></p> <p><b>H</b> <math>5 \cdot 22</math></p> <p><b>J</b> <math>2 \cdot 5 \cdot 11</math></p>                                                                                                                 | <p>What value is equivalent to <math>3^4 - 2^3 \cdot (5 - 2) - 60</math>?</p> <p><b>A</b> -3</p> <p><b>B</b> -66</p> <p><b>C</b> 159</p> <p><b>D</b> -21</p>                                                                                                                                                                                                                                                  | <p>Which of these can be written as an equation?</p> <p><b>A</b> Two times 0.75 plus <math>m</math></p> <p><b>B</b> Three is less than twice <math>a</math></p> <p><b>C</b> Half the product of five and <math>j</math></p> <p><b>D</b> Four times <math>n</math> is 24</p>                         |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monday    | <p>Which expression is equivalent to <math>53p + (16p + 7p)</math>?</p> <p><b>A</b> <math>(16p \cdot 7p) + 53p</math></p> <p><b>B</b> <math>(53p \cdot 16p) \cdot 7p</math></p> <p><b>C</b> <math>(16p + 7p) \cdot 53p</math></p> <p><b>D</b> <math>(53p + 16p) + 7p</math></p>                                                                                                                                                   | <p>Two expressions are shown. The second expression is not complete.</p> <p>Expression I: <math>200r - (-110)</math></p> <p>Expression II: <math>\square + 200r</math></p> <p>What number belongs in the box so that Expression I is equivalent to Expression II?</p> | <p>Which expression is equivalent to <math>(6 \cdot p) + 3</math>?</p> <p><b>F</b> <math>3 - (6 \cdot p)</math></p> <p><b>G</b> <math>3 + (p \cdot 6)</math></p> <p><b>H</b> <math>6 + 3 \cdot p</math></p> <p><b>J</b> <math>6 \cdot (p + 3)</math></p>                                                                                                           | <p>Regina writes the expression <math>y + 9 \cdot \frac{3}{4}</math>. Which expression is equivalent to the one Regina writes?</p> <p><b>A</b> <math>(9 \cdot 3 \div 4) + y</math></p> <p><b>B</b> <math>9 + y \cdot (3 \div 4)</math></p> <p><b>C</b> <math>(y + 9)(3 \div 4)</math></p> <p><b>D</b> None of these</p>                                                                              |
| Tuesday   | <p>Shea wrote the expression <math>5(y + 2) + 4</math> to show the amount of money five friends paid for snacks at a baseball game. Which expression is equivalent to the one Shea wrote?</p> <p><b>F</b> <math>5 + y + 5 + 2 + 4</math></p> <p><b>G</b> <math>5 \cdot y \cdot 5 \cdot 2 + 4</math></p> <p><b>H</b> <math>5 \cdot y \cdot 4 + 5 \cdot 2 \cdot 4</math></p> <p><b>J</b> <math>5 \cdot y + 5 \cdot 2 + 4</math></p> | <p>Which expression is equivalent to <math>y \cdot 48</math>?</p> <p><b>F</b> <math>(y \cdot 40) + 8</math></p> <p><b>G</b> <math>(y \cdot 4) \cdot 8</math></p> <p><b>H</b> <math>(y \cdot 40) + (y \cdot 8)</math></p> <p><b>J</b> <math>(y \cdot 4) + 8</math></p> | <p>Which expression is equivalent to <math>30 \div (3 + x)</math>?</p> <p><b>F</b> <math>(3 + x) \div 30</math></p> <p><b>G</b> <math>30 \div (x + 3)</math></p> <p><b>H</b> <math>(3 \div 30) + x</math></p> <p><b>J</b> <math>30 \div 3 + 30 \div x</math></p>                                                                                                   | <p>Which two expressions are equivalent?</p> <p><b>A</b> <math>4 + (3 \cdot y)</math> and <math>(4 + 3) \cdot y</math></p> <p><b>B</b> <math>(18 \div y) + 10</math> and <math>10 + (y \div 18)</math></p> <p><b>C</b> <math>12 - (y \cdot 2)</math> and <math>12 - (2 \cdot y)</math></p> <p><b>D</b> <math>(10 - 6) \div y</math> and <math>10 - (6 \div y)</math></p>                             |
| Wednesday | <p>Which two expressions are equivalent?</p> <p><b>F</b> <math>9(6 + x)</math><br/><math>9 \cdot 6 + 9 \cdot x</math></p> <p><b>G</b> <math>x + (8 \cdot 9)</math><br/><math>(x + 8) \cdot 9</math></p> <p><b>H</b> <math>8 \cdot 6 \div x</math><br/><math>8 \cdot x \div 6</math></p> <p><b>J</b> <math>6 \cdot x + 3</math><br/><math>6 \cdot (x + 3)</math></p>                                                               | <p>Which expression is equivalent to <math>3(x + 6)</math>?</p> <p><b>A</b> <math>3 + x + 3 + 6</math></p> <p><b>B</b> <math>3x + 6</math></p> <p><b>C</b> <math>3 + x + 6</math></p> <p><b>D</b> <math>3x + 18</math></p>                                            | <p>After 4 new students joined a class, the class had 32 students. Which equation can be used to find <math>n</math>, the number of students in the class before the 4 new students joined?</p> <p><b>A</b> <math>\frac{n}{4} = 32</math></p> <p><b>B</b> <math>n - 4 = 32</math></p> <p><b>C</b> <math>4n = 32</math></p> <p><b>D</b> <math>n + 4 = 32</math></p> | <p>Liang has a goal of walking at least 18 miles. She walks at a rate of 4 miles per hour. Which inequality can Liang use to find <math>h</math>, the number of hours she should walk in order to meet or exceed her goal?</p> <p><b>F</b> <math>4h \geq 18</math></p> <p><b>G</b> <math>4h \leq 18</math></p> <p><b>H</b> <math>h + 4 \geq 18</math></p> <p><b>J</b> <math>h + 4 \leq 18</math></p> |