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

Thursday	Which expression is equivalent to $16 + 2 \cdot 36$? **F** $2^4 + 2^3 \cdot 3^2$ **G** $2^3 + 2^3 \cdot 3^2$ **H** $2^4 + 2^2 \cdot 3^2$ **J** $2^3 + 2^2 \cdot 3^3$	Keith wrote the expression shown to determine the cost in dollars for an upcoming trip. $(127.50 - 23.50) + 3(86.50 + 4)$ Which expression is equivalent to the one Keith wrote? **F** $107(90.50)$ **G** $101(90.50)$ **H** $104 + 3(90.50)$ **J** $104 + 263.50$	Leon wrote an expression that is equivalent to $(30 + 6) \div 12$. Which expression could be the one Leon wrote? **A** $36 \div 3 \cdot 4$ **B** $(3 \cdot 3 \cdot 4) \div 4 \cdot 3$ **C** $5 \cdot 6 + 2 \cdot 3 \div 3 \cdot 2 \cdot 2$ **D** $(3 \cdot 3 \cdot 2 \cdot 2) \div (3 \cdot 2 \cdot 2)$	Mr. Gonzales showed students part of the prime factorization of 90. One factor is missing. $2 \cdot 3^2 \cdot \_\_$ What number completes this prime factorization?
Friday	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. $65 - 2 \cdot 7 + 9 \div 3$ Based on this expression, what is the amount of money Frank had remaining? **A** \$150 **B** \$54 **C** \$20 **D** \$444	What is the prime factorization of 110? **F** $5^2 \cdot 11$ **G** $2^5 \cdot 11$ **H** $5 \cdot 22$ **J** $2 \cdot 5 \cdot 11$	What value is equivalent to $3^4 - 2^3 \cdot (5 - 2) - 60$? **A** -3 **B** -66 **C** 159 **D** -21	Which of these can be written as an equation? **A** Two times 0.75 plus m **B** Three is less than twice a **C** Half the product of five and j **D** Four times n is 24

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