

Instructions: This is a **non-calculator** quiz. You must show all work to receive credit. Perform the indicated operations.

1. 
$$\begin{array}{r} 43,389 \\ +82,594 \\ \hline \end{array}$$

$$125,983$$

2. 
$$\begin{array}{r} 82,594 \\ -43,389 \\ \hline \end{array}$$

$$39,205$$

3. 
$$\begin{array}{r} 632 \\ \times 75 \\ \hline \end{array}$$

$$\begin{array}{r} 3160 \\ 4424 \\ \hline 47,400 \end{array}$$

4.  $78,621 \div 12 =$

$$\begin{array}{r} 6551 \text{ R } 9 \\ 12 ) 78,621 \\ -72 \\ \hline 66 \\ -60 \\ \hline 62 \\ -60 \\ \hline 21 \\ -12 \\ \hline 9 \end{array}$$

5.  $7 + (3^2 + 2^2) \times 2(5^2) - 2^5 \div 4 + 1 = 650$

$$7 + (9+4) \times 2(25) - 32 \div 4 + 1$$

$$7 + 13 \times 50 - 8 + 1 = 7 - 8 + 1 + 650 = 650$$

$$48, 1, 2, 24, 4, 12, 3, 16, 8, 6$$

$$1, 116, 2, 58, 4, 29$$

6. a. Find the Greatest Common Factor of 48 and 116.

$$4$$

$$\begin{array}{c} 48 \\ \diagup \quad \diagdown \\ 2 \quad 24 \\ \diagup \quad \diagdown \\ 2 \quad 12 \\ \diagup \quad \diagdown \\ 2 \quad 6 \\ \diagup \quad \diagdown \\ 2 \quad 3 \end{array} \qquad \begin{array}{c} 116 \\ \diagup \quad \diagdown \\ 2 \quad 58 \\ \diagup \quad \diagdown \\ 2 \quad 29 \end{array}$$

b. Find the Least Common Multiple of 12 and 21.

$$12, 24, 36, 48, 60, 72, 84, \dots$$

$$21, 42, 63, 84, \dots$$

$$84$$

$$\begin{aligned} 12 &= 2 \cdot 2 \cdot 3 \\ 21 &= 3 \cdot 7 \\ \text{LCM} &= 3 \times (2 \cdot 2) \cdot (7) = 84 \end{aligned}$$