

1. Give an example of the identity property of addition.

$$x + 0 = x$$

(x can be any number)

2. Give an example of the identity property of multiplication.

$$x \cdot 1 = x \quad (x \text{ can be any number})$$

3. If $x = 3 + 5$ what is the absolute value of x ?

$$x = 3 + 5 = 8 \quad |x| = |8| = 8$$

4. If $x = 3 - 5$ what is the absolute value of x ?

$$x = 3 - 5 = -2 \quad |x| = |-2| = 2$$

5. Estimate: $2,345 - 6,789 \approx$ (multiple answers possible)

front-end estimation: nearest thousand: nearest hundred:
 $2,000 - 6,000 = -4,000$ $2,000 - 7,000 = -5,000$ $2,300 - 6,800 = -4,500$

6. Compute: $2,345 - 6,789 =$

$$2,345 + (-6,789) = \begin{array}{r} 6,789 \\ -2,345 \\ \hline \end{array}$$

7. Compute: $(-123) + (-456) =$

$$\boxed{-4,444}$$

$$\begin{array}{r} 123 \\ +456 \\ \hline \end{array} \rightarrow \boxed{-579}$$

8. Multiply: $(-273) \times 419 =$

$$\begin{array}{r} 273 \\ \times 419 \\ \hline \end{array}$$

9. Multiply: $0.65 \times 53 =$

$$\begin{array}{r} 2457 \\ 2730 \\ \hline 109200 \\ -114387 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \\ \times 53 \\ \hline 195 \\ 3250 \\ \hline \end{array}$$

$$\begin{array}{r} 3445 \\ = 3.445 \end{array}$$

10. Divide; give the answer as a whole number and remainder: $1,098 \div 65 =$

$$\begin{array}{r} 16 \\ 65 \overline{) 1,098} \\ \underline{65} \\ 3448 \\ \underline{390} \\ 58 \end{array} = 16 R 58$$

11. Check your answer to question #10. "Multiply the quotient by the divisor and add the remainder. The result should match the dividend."

quotient = 16 dividend = 1,098
 divisor = 65 remainder = 58

$$\begin{array}{r} 16 \\ \times 65 \\ \hline 390 \\ 650 \\ \hline 1,040 + 58 = 1,098 \checkmark \end{array}$$

12. Divide, giving the answer as a decimal: $(-36.81) \div (0.9) =$

$$\begin{array}{r} 40.9 \\ 0.9 \overline{) 36.81} \end{array}$$

$$\boxed{-40.9}$$