

WARM-UP

1.

Compare using $>$, $<$, or $=$.

$$100 \times 2 \square 100 + 100 + 100$$

$$a \times 2 \square a \div 2$$

$$12 \div c \square 18 \div c$$

$$56 \times 3 \square 56 \times 8$$

$$m \times n \square n \times m$$

$$d \div 4 \square d \div 5$$

$$25 \times 4 \square 4 \times 25$$

$$b + b \times 7 \square b \times 8$$

$$y \div 1 \square y \times 1$$

$$17 \times 8 \square 7 \times 17$$

$$x \times 7 - x \square x \times 6$$

$$z + 1 \square z \times 1$$

2.

Total each set of money amounts:

$$\begin{array}{r} \$7.10 \\ + \$8.14 \\ \hline \end{array}$$

$$\begin{array}{r} \$6.99 \\ + \$8.85 \\ \hline \end{array}$$

$$\begin{array}{r} \$5.71 \\ + \$5.82 \\ \hline \end{array}$$

$$\begin{array}{r} \$5.57 \\ + \$4.65 \\ \hline \end{array}$$

$$\begin{array}{r} \$7.91 \\ + \$3.76 \\ \hline \end{array}$$

3.

Open up the parentheses:

$$(s + 3) + (4 + a) = \underline{\hspace{2cm}}$$

$$(f + 4) - (g + 64) = \underline{\hspace{2cm}}$$

$$(n + b - d) + 14 = \underline{\hspace{2cm}}$$

$$(20 - t) - (w + v) = \underline{\hspace{2cm}}$$

$$(d + 8) + (7 - a) = \underline{\hspace{2cm}}$$

$$(20 - z) - (7 - a) = \underline{\hspace{2cm}}$$

NEW MATERIAL**Order of Operations:**

- Multiply and divide from left to right.
- Add and subtract from left to right.
- Grouping symbols such as parentheses () allow you to determine the order by which particular operations are performed. Parentheses are also used in this manner to clarify order of operations in confusing or abnormally large expressions.

4.

Solve each expression using the correct order of operations (number the operation first):

$$8 \div 1 + 2 \times 7 = \underline{\hspace{2cm}}$$

$$30 \div 6 \times 7 - 21 \div 3 + 16 \div 8 = \underline{\hspace{2cm}}$$

$$9 \times 4 - 45 \div 5 = \underline{\hspace{2cm}}$$

We read the ***absence*** of a written operator to indicate multiplication:

$$ab \text{ means } a \times b$$

$$3(a + b) \text{ means } 3 \times (a + b)$$

“Expanding” – removing parentheses:

$$\text{Expand: } 3 \times (5 + 2)$$

$$\text{Answer: } 3 \times 5 + 3 \times 2$$

It is now expanded.

5.

Expand the following by removing parentheses:

$$3(x + 6) = \underline{\hspace{2cm}}$$

$$2(8 - x) = \underline{\hspace{2cm}}$$

$$4(2x + 3) = \underline{\hspace{2cm}}$$

$$5(4 - 3x) = \underline{\hspace{2cm}}$$