Name ____________________________

**Numerical Expressions**

Write an expression to match the words.

1. Ethan collected 16 seashells. He lost 4 of them while walking home.
   
   \[ 16 - 4 \]

   
   \[ 4 \times \$3 \]

3. Amani did 10 jumping jacks. Then she did 7 more.

   \[ 10 + 7 \]

4. Darryl has a board that is 8 feet long. He cuts it into pieces that are each 2 feet long.

   \[ 8 \div 2 \]

Write words to match the expression. **Check students’ work.**

5. \[ 3 + (4 \times 12) \]

6. \[ 36 \div 4 \]

7. \[ 24 - (6 + 3) \]

Draw a line to match the expression with the words.

8. Ray picked 30 apples and put them equally into 3 baskets. Then he ate two of the apples in a basket.

   \[ (3 \times 2) \times 30 \]

9. Quinn had $30. She bought a notebook for $3 and a pack of pens for $2.

   \[ (30 \div 3) - 2 \]

10. Colleen runs 3 miles twice a day for 30 days.

   \[ 30 - (3 + 2) \]

**Problem Solving**

11. Kylie has 14 polished stones. Her friend gives her 6 more stones. Write an expression to match the words.

   \[ 14 + 6 \]

12. Rashad had 25 stamps. He shared them equally among himself and 4 friends. Then Rashad found 2 more stamps in his pocket. Write an expression to match the words.

   \[ (25 \div 5) + 2 \]
Evaluate Numerical Expressions

Evaluate the numerical expression.

1. \(24 \times 5 - 41\)
2. \((32 - 20) \div 4\)
3. \(16 \div (2 + 6)\)
4. \(15 \times (8 - 3)\)

\[
\begin{array}{cccc}
79 & 3 & 2 & 75 \\
5. 4 \times 8 - 7 & 6. 27 + 5 \times 6 & 7. 3 \div 3 \times 4 + 6 & 8. 14 + 4 \times 4 - 9
\end{array}
\]

\[
\begin{array}{cccc}
25 & 57 & 10 & 21 \\
\end{array}
\]

Rewrite the expression with parentheses to equal the given value.

9. \(3 \times 4 - 1 + 2\) value: 11
10. \(2 \times 6 \div 2 + 1\) value: 4
11. \(5 + 3 \times 2 - 6\) value: 10

\[
3 \times (4 - 1) + 2 (2 \times 6) \div (2 + 1) (5 + 3) \times 2 - 6
\]

Problem Solving REAL WORLD

12. Sandy has several pitchers to hold lemonade for the school bake sale. Two pitchers can hold 64 ounces each, and four pitchers can hold 48 ounces each. How many total ounces can Sandy’s pitchers hold?

320 ounces

13. At the bake sale, Jonah sold 4 cakes for $8 each and 36 muffins for $2 each. What was the total amount, in dollars, that Jonah received from these sales?

$104
**Grouping Symbols**

Evaluate the numerical expression.

1. \(5 \times [(11 - 3) - (13 - 9)]\)  
   \(5 \times [8 - (13 - 9)]\)  
   \(5 \times [8 - 4]\)  
   \(5 \times 4\)  
   \(20\)

2. \(30 - [(9 \times 2) - (3 \times 4)]\)  
   \(30 - [18 - 12]\)  
   \(30 - 6\)  
   \(24\)

3. \(36 + [(14 - 5) - (10 - 7)]\)  
   \(36 + [9 - 3]\)  
   \(36 + 6\)  
   \(42\)

4. \(7 \times [(9 + 8) - (12 - 7)]\)  
   \(7 \times [(17 - 5)]\)  
   \(7 \times 12\)  
   \(84\)

5. \([(25 - 11) + (15 - 9)] ÷ 5\)  
   \(14 + 6 ÷ 5\)  
   \(14 + 1.2\)  
   \(15.2\)

6. \([(8 \times 9) - (6 \times 7)] - 15\)  
   \((72 - 42) - 15\)  
   \(30 - 15\)  
   \(15\)

7. \(8 \times [(7 + 4) \times 2] - [(11 - 7) \times 4]\)  
   \(8 \times [(11 \times 2) - (4 \times 4)]\)  
   \(8 \times [22 - 16]\)  
   \(8 \times 6\)  
   \(48\)

8. \([(8 - 3) \times 2] + [(5 \times 6) - 5] ÷ 5\)  
   \((5 \times 2) + [30 - 5] ÷ 5\)  
   \(10 + 25 ÷ 5\)  
   \(10 + 5\)  
   \(15\)

**Problem Solving**

Use the information at the right for 9 and 10.

9. Write an expression to represent the total number of muffins and cupcakes Joan sells in 5 days.

   \(5 \times [(24 - 3) + (36 - 4)]\)

   \(5 \times [(21 + 32)]\)

   \(5 \times 53\)

   \(265\)

   Joan has a cafe. Each day, she bakes 24 muffins. She gives away 3 and sells the rest. Each day, she also bakes 36 cupcakes. She gives away 4 and sells the rest.

10. Evaluate the expression to find the total number of muffins and cupcakes Joan sells in 5 days.

   \(265\) muffins and cupcakes