

4.OA.A.3 Simple Expressions and Problem Solving

4.OA.A.3: Solve multistep word problems posed with whole numbers using the four operations.

1. Find the value of the expression. Follow the order of operations.

- $10 - (6 + 1)$
- $3 + (2 \times 8)$
- $(7 \times 3) + (9 - 3)$
- $(36 - 12) \div (3 + 6 - 3)$
- $(42 \div 7) \times (8 - 2 \times 3)$
- $(20 - 15) \times (13 - 5) \times 2$
- $5 \times (3 + 4 - 2)$
- $(63 \div 7) \div (11 - 4 \times 2)$

Solution:

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

2. Use parentheses to make the sentence true.

- $12 + 8 \div 1 + 4 = 4$
- $3 \times 6 - 8 + 6 \div 7 = 16$
- $16 + 2 \div 9 = 2$
- $12 \div 2 + 1 + 3 = 7$

Solution:

- _____
- _____
- _____
- _____

3. Write an expression and find the value of the expression.

- Bella has 12 dresses on her closet. 5 of them are white and 3 are red. The rest of the dresses are yellow. How many yellow dresses does Bella have?
- A bus travelled 12 miles per hour for two hours in the morning and 10 miles per hour for 3 hours in the afternoon. How far did the bus travel?
- Earl had 4 bills of \$5. He bought 4 pencils for \$2 each. He also bought 2 boxes of crayons for \$4 each. He paid \$1 in sales tax. How much money does he have now?
- Sandra has \$8. She spent \$3 but then given \$5 by her mother. How much money does Sandra have now?

Solution:

- _____
- _____
- _____
- _____

4. Write a word sentence that matches each expression.

- $6 \times (10 + 2)$
- $3 + (4 \times 5)$

Solution:

- _____
- _____

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Answer Key

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- $5 \times (3 + 4 - 2)$
- $(63 \div 7) \div (11 - 4 \times 2)$

Solution:

- $10 - 7 = 3$
- $3 + 16 = 19$
- $21 + 6 = 27$
- $24 \div (9 - 3) = 24 \div 6 = 4$
- $6 \times (8 - 6) = 6 \times 2 = 12$
- $5 \times 8 \times 2 = 40 \times 2 = 80$
- $5 \times (7 - 2) = 5 \times 5 = 25$
- $9 \div (11 - 8) = 9 \div 3 = 3$

2. Use parentheses to make the sentence true.

- $12 + 8 \div 1 + 4 = 4$
- $3 \times 6 - 8 + 6 \div 7 = 16$
- $16 + 2 \div 9 = 2$
- $12 \div 2 + 1 + 3 = 7$

Solution:

- $(12 + 8) \div (1 + 4) = 4$
- $3 \times 6 - (8 + 6) \div 7 = 16$
- $(16 + 2) \div 9 = 2$
- $12 \div (2 + 1) + 3 = 7$

3. Write an expression and find the value of the expression.

- Bella has 12 dresses on her closet. 5 of them are white and 3 are red. The rest of the dresses are yellow. How many yellow dresses does Bella have?
- A bus travelled 12 miles per hour for two hours in the morning and 10 miles per hour for 3 hours in the afternoon. How far did the bus travel?
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- Sandra has \$8. She spent \$3 but then given \$5 by her mother. How much money does Sandra have now?

Solution:

- $12 - 5 - 3 = 7 - 3 = 4$
Answer: 4 yellow dresses
- $(2 \times 12) + (3 \times 10) = 24 + 30 = 54$; Answer: 54 miles
- $(4 \times 5) - (4 \times 2) - (2 \times 4) - 1 = 20 - 8 - 8 - 1 = 12 - 8 - 1 = 4 - 1 = 3$; Answer: \$3
- $8 - 3 + 5 = 5 + 5 = 10$
Answer: \$10

4. Write a word sentence that matches each expression.

- $6 \times (10 + 2)$
- $3 + (4 \times 5)$

Solution:

- 6 times the sum of 10 and 2
- 3 added to the product of 4 and 5