Order of Operations (BEDMAS)

Solve the following problems by applying the correct order of operations:

---

1. **B**rackets
2. **E**xponents (Powers and Roots)
3. **D**ivision and **M**ultiplication (from left to right)
4. **A**ddition and **S**ubtraction (from left to right)

Warm-up Calculations: Find the value of each expression.

1. $7 + 3 \times 5 =$

---

2. $20 - 12 \div 4 =$

---

3. $(8 + 4) \times 2 =$

---

4. $5^2 - 10 \div 5 =$

5. $16 \div 4 + 2 \times 6 =$

Matching Pairs: Draw a line to match each expression in the left column with its correct answer in the right column.

(A) $4 \times (5 + 1)$	21
(B) $4 \times 5 + 1$	10
(C) $20 \div 5 + 5$	24
(D) $20 \div (5 + 5)$	2
(E) $3 + 4^2 - 7$	9

Fill in the Blanks: Fill in the missing number or operator to make the equation true.

---

6. $8 + \_\_\_\_ \times 3 = 20$

---

7. $(15 - 5) \_\_\_\_ 2 = 5$

---

8. $4^2 - (\_\_\_\_ + 3) = 7$

Insert Brackets: Add one pair of brackets to make each equation true.

9. $5 + 3 \times 4 - 1 = 31$

10. $20 \div 5 - 1 \times 2 = 10$

11. $6 + 4 \div 2 + 3 = 5$

Evaluation Table: Substitute the values for a, b, and c into each expression and evaluate.

a	b	c	$a + b \times c$	$(a + b) \times c$	$a^2 - c$
2	5	3			
-4	6	2			
10	-3	-1			

Find the Mistake: The following problem has been solved incorrectly. Circle the mistake, explain what was done wrong, and find the correct answer.

Problem: $20 - 2 \times (5 + 1)^2$

Incorrect Solution:

Line 1: $20 - 2 \times 6^2$

Line 2: $20 - 12^2$

Line 3: $20 - 144$

Line 4: -124

Challenge Zone: Use your BEDMAS skills to solve these tricky problems.

12. $8 \times [10 - (1 + 3)^2 \div 4]$

13. $\dfrac{5^2 - 1}{4 + 2 \times 4}$

14. $\sqrt{16} + 3 \times (15 \div (9 - 4))$