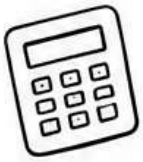
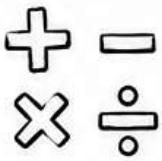
Name: _____ prtutorial.in Date: _____ Class: _____



Use the order of operations (PEMDAS) to solve each expression.
Show your work if needed.



Remember the order:

1. Parentheses ( )
2. Exponents (powers and roots) ^{2} ^{3} $\sqrt{}$
3. Multiplication and Division (left to right)
4. Addition and Subtraction (left to right)

Example:

Evaluate: $3 + 4 \times (2 + 6)$

1. Parentheses: $(2 + 6) = 8$
2. Multiplication: $4 \times 8 = 32$
3. Addition: $3 + 32 = 35$

The order helps you find the correct answer, especially when there are multiple operations in one problem.

A. Evaluate each expression.

1. $7 + 3 \times 4$ = _____
2. $18 - 6 \div 3$ = _____
3. $5 \times (9 - 4)$ = _____
4. $(12 + 8) \div 5$ = _____
5. $6^2 + 8 \times 2$ = _____
6. $50 - 5 \times 7$ = _____
7. $(3 + 5) \times (10 - 6)$ = _____
8. $9 + 4^2 - 7$ = _____

B. Evaluate each expression.

1. $16 \div 4 + 7$ = _____
2. $8 \times (6 - 2) + 3$ = _____
3. $12 + 5^2 - 4$ = _____
4. $(14 - 6) \times 3$ = _____
5. $9 + (7 \times 3) \div 2$ = _____
6. $20 - 4^2 + 6$ = _____
7. $(18 \div 3) + (6 \times 2)$ = _____
8. $15 - (10 - 4) \times 2$ = _____

C. Solve the word problems. Write the number sentence and find the answer.

1. A basket has 4 bags of apples. Each bag has 6 apples. How many apples are there in all?
   Number sentence: _____
   Answer: _____
2. A movie costs $8. You buy 3 tickets and have $5 left. How much money did you have at first?
   Number sentence: _____
   Answer: _____
3. A rectangle has a length of 12 cm and a width of 5 cm. What is the area?
   Number sentence: _____
   Answer: _____

D. Use the order of operations to simplify each expression.

1. $6 + 2 \times (9 - 3)$ = _____
2. $(15 \div 3) + 7 \times 2$ = _____
3. $4^2 + (8 - 3) \times 5$ = _____
4. $(20 - 12) \div 4 + 6$ = _____
5. $3 \times (7 + 5) - 8$ = _____
6. $5^2 - (16 \div 4) \times 2$ = _____
7. $(9 + 6) \times (8 - 5) \div 3$ = _____
8. $14 - 6 \times (3 + 1)$ = _____

E. Which operation should be done first? Write the number of the operation (1–5) for each expression.

1. $5 + 3 \times 2$ _____
2. $(8 + 4) \div 2$ _____
3. $6^2 + 5$ _____
4. $18 - 3 \times 5$ _____
5. $4 + (9 - 6) \times 3$ _____
6. $12 \div (3 + 1)$ _____

1. Parentheses
2. Exponents
3. Multiplication/Division
4. Addition/Subtraction

F. Challenge

Solve each expression. Show your steps if needed.

1. $(7 + 5) \times (9 - 3) + 4^2$ = _____
2. $50 \div (5 + 5) \times 2 + 6$ = _____
3. $8^2 - (3 \times 4) + 7$ = _____
4. $(16 - 8) \div 2 + 5^2$ = _____
5. $6 \times (4 + 2) - (3^2 - 5)$ = _____