

PEMDAS Power

Grade 5 • MATH • Order of operations (PEMDAS) • Standards: 5.OA.A.1

Solve each problem using the order of operations: Parentheses, Exponents, Multiply/Divide (left to right), Add/Subtract (left to right). Show your work and write your final answer!

1. $8 + 3 \times 2$

2. $15 - 6 \div 3$

3. $(9 + 3) \times 2$

4. $20 - (4 + 6)$

5. $5 \times 4 - 7$

6. $18 \div 3 + 9$

7. $3^2 + 8$

8. $6 + 4 \times 3 - 5$

9. $(12 - 4) \times 2 + 7$

10. $24 \div (3 + 1) \times 2$

11. $2^3 - 4 \times 2$

12. $30 - 6 \times (2 + 3)$

13. $(5 + 3)^2 \div 4 - 10$

14. $48 \div (2^3 - 2) + 5 \times 3$

Answer Key — PEMDAS Power

For the teacher / parent. Do not distribute with the worksheet.

1. 14 (Multiply first: $3 \times 2 = 6$, then add: $8 + 6 = 14$)
2. 13 (Divide first: $6 \div 3 = 2$, then subtract: $15 - 2 = 13$)
3. 24 (Parentheses first: $9 + 3 = 12$, then multiply: $12 \times 2 = 24$)
4. 10 (Parentheses first: $4 + 6 = 10$, then subtract: $20 - 10 = 10$)
5. 13 (Multiply first: $5 \times 4 = 20$, then subtract: $20 - 7 = 13$)
6. 15 (Divide first: $18 \div 3 = 6$, then add: $6 + 9 = 15$)
7. 17 (Exponent first: $3^2 = 9$, then add: $9 + 8 = 17$)
8. 13 (Multiply first: $4 \times 3 = 12$, then left to right: $6 + 12 - 5 = 13$)
9. 23 (Parentheses: $12 - 4 = 8$, multiply: $8 \times 2 = 16$, add: $16 + 7 = 23$)
10. 12 (Parentheses: $3 + 1 = 4$, divide: $24 \div 4 = 6$, multiply: $6 \times 2 = 12$)
11. 0 (Exponent: $2^3 = 8$, multiply: $4 \times 2 = 8$, subtract: $8 - 8 = 0$)
12. 0 (Parentheses: $2 + 3 = 5$, multiply: $6 \times 5 = 30$, subtract: $30 - 30 = 0$)
13. 6 (Parentheses: $5 + 3 = 8$, exponent: $8^2 = 64$, divide: $64 \div 4 = 16$, subtract: $16 - 10 = 6$)
14. 23 (Exponent: $2^3 = 8$, parentheses: $8 - 2 = 6$, divide: $48 \div 6 = 8$, multiply: $5 \times 3 = 15$, add: $8 + 15 = 23$)