

Part 1. Sample Problems

Simplify each of the following expressions by applying the order of operations agreement.

1. $2 \cdot 3^2 - (6^2 - 2 \cdot 5) \div 2 = 5$

2. $18 - 7 - 3 = 8$

3. $5^2 - 2(10 - 2^2) = 13$

4. $8^2 - 3^2 = 55$

5. $(8 - 3)^2 = 25$

6. $(3^3 - 4 \cdot 5 + 2)^2 = 81$

7. $\frac{3 + 2(20 - 3^2 - 5)}{3^2 - 2^2} + 4^1 = 7$

Part 2. Practice Problems

1. $2 \cdot 5^2 - (6 \cdot 5 - 3^2) \div 3 = 43$

2. $10^2 - 7^2 = 51$

3. $(10 - 7)^2 = 9$

4. $20 - 7 - 1 = 12$

5. $2^3 - (11 - 3^2)^2 = 4$

6. $\frac{5^2 - 3^2}{2^2} = 4$

7. $\frac{(5 - 3)^2}{2^2} = 1$

8. $120 \div 6 \cdot 2 = 40$

9. $((7 - 4)^2 - 5)^2 - 1 = 15$

10. $\frac{22 - 3^2 + 2(20 - 3^2 - 5)}{3^2 - 2^2} = 5$

11. $\frac{5 + (5^2 - 3^2)}{3^2 - 2 \cdot 1^8} = 3$

12. $30 - (2(15 - 2^3) - 2^2) = 20$

13. $4(3(2(2^2 - 1) + 1) - 1) + 5 = 85$

14. $\frac{2(3^3 - 4 \cdot 5) - 2^2}{4^2 - (3^2 + 2)} = 2$