

BIDMAS and Simplifying Algebraic Expressions

Simplify the following (note that 'x' means multiply throughout this worksheet)

Bronze

1. $3p + 2p \times 4$

7. $2m - 2m \times 2m + 2m$

2. $4 \times 3q - 8q$

8. $16rs + 6r \times 6s$

3. $p - p \times 4p$

9. $5t \times 4t \times 3t - 2t \times t$

4. $6qp + 4pq$

10. $4rf - 6fr + r \times 5f$

5. $12e \times y - 3y \times 4e$

11. $2b - 2b \times 4a - 4a$

6. $-2a - 4 \times 3a + 7a$

12. $3abc + 3ac \times 2b - 2ca + b$

Silver

1. $p^2q + 5p \times 4pq$

6. $-8ab - 4 \times 2ba + 4ab$

2. $-8 \times 3zq - 5qz$

7. $2m^2 - 2m^3 \times 2m + 2m^4$

3. $p^7 - p^3 \times 4p^3$

8. $21r^5s^2 + 3s^5 \times 7r^2$

4. $61q^3p^2 + 14p^2q^3$

9. $3t \times 4s^2 \times 3t - (2st)^2$

5. $(5st)^2 + 5st^2 + 5s^2t + 5s^2t^2$

10. $3r^3f - 8fr^3 + 7r \times 2fr^2$

Gold

1. $4pr + 2r^3p \times 4p - 6r \times 12p + 18pr^3$

2. $16ab^2 - (12ab)^2 - a \times (-3b^2) - 8a^2b^2$

3. $a - a \times a + a \times a \times a - a \times a + a - a \times a + a \times 2$

4. $ab - 2ba + ab^2 - ba^2 - b + a \times 3b - a \times b \times b \times 7$

5. $8m^2 + 2 \times ((3m)^2 - 7m^2)^3 \times 4m^2$

BIDMAS and Simplifying Algebraic Expressions

Answers

Bronze

1. $11p$

2. $4q$

3. $p - 4p^2$

4. $10pq$

5. 0

6. $-5a$

7. $4m - 4m^2$

8. $52rs$

9. $60t^3 - 2t^2$

10. $3rf$

11. $2b - 8ab - 4a$

12. $9abc - 2ca + b$

Silver

1. $6p^2q$

2. $29qz$

3. $p^7 - 4p^6$

4. $61q^3p^2 + 14p^2q^3$

5. $30s^2t^2 + 5s^2t + 5st^2$

6. $-12ab$

7. $2m - 2m^4$

8. $21r^5s^2 + 21s^5r^2$

9. $32s^2t^2$

10. $8fr^3$

Gold

1. $26p^2r^3 - 68pr$

2. $19ab^2 - 152a^2b^2$

3. $4a - 3a^2 + a^3$

4. $2ab - b - 6ab^2 - a^2b$

5. $8m^2 + 64m^8$