Combining Like Terms Worksheet

Name: _____ Class: _____ Date: _____

Section A: Basic — Combine Like Terms

Simplify each expression.

1. $3x + 2x$
2. $5a + 4a$
3. $7y - 3y$
4. $6m + 2m - m$
5. $8p - 5p$
6. $4x + 3 + 2x$
7. $5a + 2b + 3a$
8. $9y - 4y + 2y$
9. $3m + 5 + 2m + 4$
10. $7p + 2q - 3p$

Section B: Intermediate — Positive and Negative Terms

1. $6x - 2x + 5x$
2. $8a + 3 - 5a + 7$
3. $4y - 7 + 2y + 10$
4. $9m - 3n + 2m + 5n$
5. $12p - 5p + 3 - 8$
6. $7x + 4y - 3x + 2y$
7. $10a - 4b - 6a + 7b$
8. $5m + 3n - 2m - 8n$
9. $11x - 6 + 2x + 9$
10. $4p - 7q + 3p + 2q - 5$

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Section C: Remove Brackets and Simplify

1. $3(x + 2) + 2x$
2. $5(a - 3) + 2a$
3. $4(2y + 1) - 3y$
4. $2(m + 5) + 3(m - 2)$
5. $6(x - 2) - 2(x + 1)$
6. $3(2a + 4) + 2(a - 5)$
7. $5(2p - 3) - 3(p + 2)$
8. $4(x + 3) - 2(x - 5)$

Section D: Fractions and Decimals

1. $\frac{1}{2}x + \frac{3}{2}x$
2. $0.5a + 1.2a$
3. $2.5y - 0.5y + y$
4. $\frac{3}{4}m + \frac{1}{4}m$
5. $1.5p + 2p - 0.5p$
6. $\frac{2}{3}x + \frac{1}{3}x + 2x$

Section E: Advanced Expressions

1. $3x + 2y - 5x + 7y$
2. $4a - 3b + 6a + 8b - 2a$
3. $5x^2 + 3x - 2x^2 + 4x$
4. $7a^2 - 3a + 2a^2 + 5a$
5. $4xy + 3x - 2xy + 5x$
6. $6m^2 + 2m - 4m^2 + 7m - 3$
7. $3x^2 + 2x - 5 + 4x^2 - 6x + 8$
8. $2a + 3b - 4a + 5b + 6a - 2b$

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Section F: Challenge Questions

Simplify fully.

1. $3(2x + 4) - 2(x - 5) + x$
2. $4(3a - 2) - 3(2a + 5) + 7a$
3. $2(x^2 + 3x) - 4(x^2 - x) + 5x^2$
4. $5(2m - n) - 3(m + 2n) + 4n$
5. $2(3x + 4y) - 3(x - 2y) + 5x - y$
6. $4a^2 - 3a + 2(2a^2 + a) - 5a^2 + 7$