

1. $3x + 5x$

$$3 + 5 = 8$$

Answer: $8x$

2. $7x - 2x$

$$7 - 2 = 5$$

Answer: $5x$

3. $4x + 3 + 2x$

$$x: 6x; \text{ constant: } 3$$

Answer: $6x + 3$

4. $5x + 2 - 3x + 4$

$$x: 2x; \text{ numbers: } 6$$

Answer: $2x + 6$

5. $6x - 4 - x + 9$

$$x: 5x; \text{ numbers: } 5$$

Answer: $5x + 5$

6. $2x + 3y + 4x$

$$x: 6x; y \text{ stays}$$

Answer: $6x + 3y$

7. $x^2 + 3x + 2x^2$

$$x^2: 3x^2; x \text{ stays}$$

Answer: $3x^2 + 3x$

8. $-3x + 7 + 8x - 2$

$$x: 5x; \text{ numbers: } 5$$

Answer: $5x + 5$

9. $4x^2 - 3x + 7 - x^2 + 5x - 12$ ★ challenge

$$x^2: 4 - 1 = 3x^2$$

$$x: -3 + 5 = 2x$$

$$\text{numbers: } 7 - 12 = -5$$

Answer: $3x^2 + 2x - 5$

10. $2a - 3b + 4 - 5a + 3b - 4 + 3a$ ★ challenge

$$a: 2 - 5 + 3 = 0$$

$$b: -3 + 3 = 0$$

$$\text{numbers: } 4 - 4 = 0$$

Answer: 0