

1.

$$(x^2 - 8x) + (6x - 48)$$

$$x(x - 8) + 6(x - 8)$$

$$(x - 8)(x + 6)$$

2.

$$(x^2 - 10x) + (-12x + 120)$$

$$x(x - 10) - 12(x - 10)$$

$$(x - 10)(x - 12)$$

3.

$$(x^2 + 12x) + (-1x - 23)$$

$$x(x + 23) - 1(x + 23)$$

$$(x + 23)(x - 1)$$

4.

$$(x^2 + 11x) + (3x + 33)$$

$$x(x + 11) + 3(x + 11)$$

$$(x + 11)(x + 3)$$

5.

$$(x^2 - 2x) + (7x - 14)$$

$$x(x - 2) + 7(x - 2)$$

$$(x - 2)(x + 7)$$

6.

$$(7x^2 - 3x) + (14x - 6)$$

$$x(7x - 3) + 2(7x - 3)$$

$$(7x - 3)(x + 2)$$

7.

$$(16x^2 + 10x) + (-24x - 15)$$

$$2x(8x + 5) - 3(8x + 5)$$

$$(8x + 5)(2x - 3)$$

8.

$$(8x^2 - 10x) + (4x - 5)$$

$$2x(4x - 5) + 1(4x - 5)$$

$$(4x - 5)(2x + 1)$$

9.

$$(5x^2 - 1x) + (10x - 2)$$

$$x(5x - 1) + 2(5x - 1)$$

$$(5x - 1)(x + 2)$$

10.

$$(4x^2 - 2x) + (14x - 7)$$

$$2x(2x - 1) + 7(2x - 1)$$

$$(2x - 1)(2x + 7)$$