

Name:

Factoring Quadratic Expressions

Factor each expression completely

1 $x^2 + 36x$

2 $2x^2 + 7x + 6$

3 $p^2 + 5p + 4$

4 $125x^2 - 25$

5 $x^2 + 2x - 24$

6 $27x^2 - 3$

7 $7x^2 - 45x - 28$

8 $2x^2 + 4x - 6$

9 $2k^2 + 6k + 4$

10 $x^2 + 14x + 40$

11 $15x^2 + 8x - 16$

12 $x^2 + 10x + 24$

13 $x^2 + 12x - 64$

14 $x^2 + 3x - 18$

Factoring Quadratic Expressions

Answers

[1] $x^2 + 36x$

$x(x + 36)$

[3] $p^2 + 5p + 4$

$(p + 1)(p + 4)$

[5] $x^2 + 2x - 24$

$(x - 4)(x + 6)$

[7] $7x^2 - 45x - 28$

$(7x + 4)(x - 7)$

[9] $2k^2 + 6k + 4$

$2(k + 1)(k + 2)$

[11] $15x^2 + 8x - 16$

$(5x - 4)(3x + 4)$

[13] $x^2 + 12x - 64$

$(x - 4)(x + 16)$

[2] $2x^2 + 7x + 6$

$(2x + 3)(x + 2)$

[4] $125x^2 - 25$

$25(5x^2 - 1)$

[6] $27x^2 - 3$

$3(3x + 1)(3x - 1)$

[8] $2x^2 + 4x - 6$

$2(x - 1)(x + 3)$

[10] $x^2 + 14x + 40$

$(x + 4)(x + 10)$

[12] $x^2 + 10x + 24$

$(x + 4)(x + 6)$

[14] $x^2 + 3x - 18$

$(x - 3)(x + 6)$