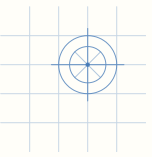


Factoring polynomials — Easy



Name: _____

Date: _____

Factor each one. The number in front of x^2 is not 1.

1 $3x^2 - 3$

$$\begin{aligned} &3(x^2 - 1) \\ &x^2 - 1: a \times c = 1 \times (-1) = -1 \\ &1 \times (-1) = -1, 1 + (-1) = 0 \\ &x^2 + x - x - 1 \\ &x(x + 1) - 1(x + 1) \\ &(x + 1)(x - 1) \\ &= 3(x - 1)(x + 1) \end{aligned}$$

2 $2x^2 + 10x + 8$

3 $2x^2 + x - 10$

4 $2x^2 - x - 1$

5 $2x^2 - 8$

6 $2x^2 - 4x - 6$

7 $3x^2 + x - 10$

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



Factoring polynomials · Easy — Answer key



1. $3x^2 - 3 = 3(x - 1)(x + 1)$

2. $2x^2 + 10x + 8 = 2(x + 1)(x + 4)$

3. $2x^2 + x - 10 = (x - 2)(2x + 5)$

4. $2x^2 - x - 1 = (2x + 1)(x - 1)$

5. $2x^2 - 8 = 2(x - 2)(x + 2)$

6. $2x^2 - 4x - 6 = 2(x + 1)(x - 3)$

7. $3x^2 + x - 10 = (3x - 5)(x + 2)$

8. $2x^2 - 4x + 2 = 2(x - 1)^2$