

■ Factor The following.

[1] $x^2 + 6x + 9$

[2] $x^2 - 10x + 25$

[3] $4x^2 + 24yx + 36y^2$

[4] $64x^2 + 16x + 1$

[5] $3x^2 + 12x + 12$

[6] $x^2 - 25$

[7] $a^2b^2x^2 + 8abx + 16$

[8] $x^2 - 1$

[9] $x^2 - 14x + 49$

[10] $x^2 - 6yx + 9y^2$

[11] $25x^2 + 50x + 25$

[12] $10x^2 - 640$

[13] $x^2 - 4$

[14] $25x^2 - 49y^2$

[15] $x^2 - 81$

[16] $9x^2 - 100$

Answers.

[1] $(x + 3)^2$

[2] $(x - 5)^2$

[3] $(2x + 6y)^2$

[4] $(8x + 1)^2$

[5] $3(x + 2)^2$

[6] $(x - 5)(x + 5)$

[7] $(abx + 4)^2$

[8] $(x - 1)(x + 1)$

[9] $(x - 7)^2$

[10] $(x - 3y)^2$

[11] $(5x + 5)^2$

[12] $10(x - 8)(x + 8)$

[13] $(x - 2)(x + 2)$

[14] $(5x - 7y)(5x + 7y)$

[15] $(x - 9)(x + 9)$

[16] $(3x - 10)(3x + 10)$