

1.9 Homework

Complete the square to write the equation in vertex form.

1) $y = x^2 + 16x + 71$

2) $y = x^2 - 2x - 5$

3) $y = -x^2 - 14x - 59$

4) $y = 2x^2 + 36x + 170$

5) $y = x^2 - 12x + 46$

6) $y = x^2 + 4x$

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Answer Key

$$1) y = x^2 + 16x + 71$$

$$y = (x + 8)^2 + 7$$

$$2) y = x^2 - 2x - 5$$

$$y = (x - 1)^2 - 6$$

$$3) y = -x^2 - 14x - 59$$

$$y = -(x + 7)^2 - 10$$

$$4) y = 2x^2 + 36x + 170$$

$$y = 2(x + 9)^2 + 8$$

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