**Completing the square Extra Practice**

**Solve the equation by completing the square.**

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| --- | --- | --- | --- |
| **1.** | y2 + 4y - 6 = 0 | **2.** | r2 − 10r + 5= 0 |
| **3.** | s2 + 4s = −4 | **4.** | x2 + 6x + 9 = 1 |
| **5.** | 3t2 - 12t + 6 = 0 | **6.** | 4p2 +4p + 1 = 49 |
| **7.** | 9g2 + 18g = 11 | **8.** | 2x2 - 19x = *x* – 1 |

**Write the function in vertex form. Give the maximum or minimum of the function.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **9.** | f(x) = x2 − 6x + 19 |        | **10.** | f(x) = x2 − 2x − 3 |
|  |  |  |  |  |
| **11.** | f(x) = −7 x2 − 14x |        | **12.** | f(x) = 3x2 − 12x - 9 |
|  |  |  |  |  |
|  |  |  |  |  |
| **13.** | f(x) = 2x2 − 6x - 1 |        | **14.** | f(x) = - x2 + 4x - 1 |
|  |  |  |  |  |

**Answers:**

1. 

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3. 

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