Quadratic Equation Practice

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Equation | a | b | c | Opens up or down | Line of Symmetry | Vertex | Min or Max | Domain | Range |
| 1. F(x) = 2x2 + 4x + 1 |  |  |  |  |  |  |  |  |  |
| 1. F(x) = -2x2 – 6x – 3 |  |  |  |  |  |  |  |  |  |
| 1. F(x) = 8x2 – 5 |  |  |  |  |  |  |  |  |  |
| 1. F(x) = 5x2 – 3x + 4 |  |  |  |  |  |  |  |  |  |
| 1. F(x) = -3x2 – 24x + 7 |  |  |  |  |  |  |  |  |  |

1. Complete the table for the given quadratic function and graph it.

|  |  |
| --- | --- |
| x | y |
| -8 |  |
| -4 |  |
| 0 |  |
| 4 |  |
| 8 |  |

*y* = 2

Identify the domain and range of this quadratic function.

1. Evaluate the quadratic functions for the given value. Show your work.

f(x) = 2x2 – 3x + 5; f(4) f(x) = -4x2 + 7x; f(-2)