Math 1 **8.6 Graphing Intercept Form** Unit 8

*SWBAT graph a quadratic function in intercept form.*

|  |
| --- |
| y = \_\_\_\_\_\_\_\_\_\_\_\_  |

Roots = Axis of Symmetry: y-intercept:



|  |  |
| --- | --- |
| **x** | **y** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Example 1:** Graph f(x) = 2(x – 4)(x – 6)

Opens: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Roots: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

AOS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Y-Int: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **x** | **y** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



**Example 2:** Graph f(x) = – (x + 1)(x – 5)

Opens: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Roots: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

AOS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Y-Int: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Practice:** Sketch the following graphs and list any important information about them.



1. Graph f(x) = – (x + 2)(x – 4)

Opens: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Roots: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

AOS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Y-Int: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Graph f(x) =2 (x + 3)(x – 1)

Opens: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Roots: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

AOS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Y-Int: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_





1. Graph f(x) = – (x +4)(x – 2)

Opens: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Roots: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

AOS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Y-Int: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Graph f(x) = – ½ (x + 2)(x – 4)

Opens: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Roots: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

AOS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Y-Int: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

