

**FM 20 7.1 Asn't**

Using your textbook, explain the following terms:

**Quadratic Relation:**

**Parabola:**

**Degree of a function:**

What is the degree of a quadratic function?

**Standard form of a quadratic function:**

**Value and effect of 'a' in a quadratic function:** when 'a' is large positive, the parabola is \_\_\_\_\_.

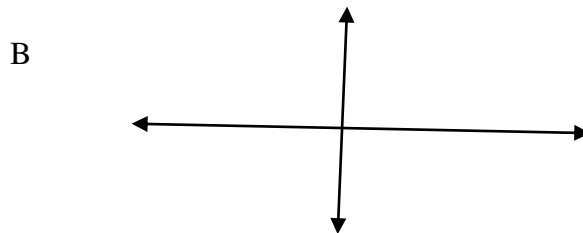
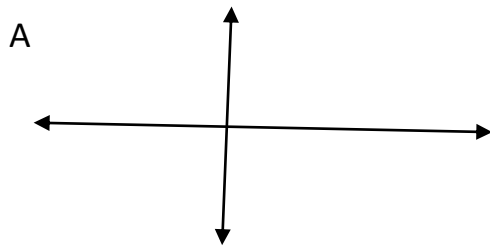
When 'a' is small negative, \_\_\_\_\_.

Graph and sketch two quadratic functions on the same graph below.

Graph A – quadratic with large positive a value and two x-intercepts

Graph B – quadratic with small negative a value and no x-intercepts

(use at least half of a page to graph)



Explain why each of these graphs *are* or *are not* quadratic

$$y = 2x(x + 3)$$

$$y = 2x - 7$$

$$y = x^2 - 5x - 6$$

$$y = 4x^3 + x^2 - x$$

$$y = (x + 4)^2 + 1$$

$$y = x(x + 1)^2 - 7$$