2.1-2.3 Assessment Review Exercises

* 2-1: Vertex Form
  + Identify Key Features of Quadratic Functions
    - Identify transformations of graph in vertex form

**Example(s):**

1. Describe the transformations of

* + - Determine axis of symmetry, domain, range, vertex, minimum/maximum of function in vertex form

**Example (s):**

2. Find the key features of the function

* 2-2: Standard Form
  + Write and graph quadratic function in standard form
    - Use key features (vertex, axis of symmetry, and y-intercept) to graph a function in quadratic form

**Example(s):**

3. Find vertex, axis of symmetry, y-intercept, and graph

4. Find vertex, axis of symmetry, y-intercept, and graph

* + - Find the vertex of a function in standard form (word problem)

**Example(s):**

5. If a projectile is fired straight upward from the ground with an initial speed of 128 feet per second, then its height h in feet after t seconds is given by . Find the maximum height of the projectile.

* + - Convert between vertex form and standard form

**Example(s):**

6. Convert to vertex form

7. Convert to standard form

* 2-3: Factored Form
  + Find the zeroes of quadratic functions
    - Factor a quadratic expression (standard, factoring GCF, and ac method)

**Example(s):**

8. Factor:

9. Factor:

10. Factor:

11. Factor:

* + - Solve quadratic equations using factoring

**Example(s):**

12. Solve using the zero product property:

13. Solve:

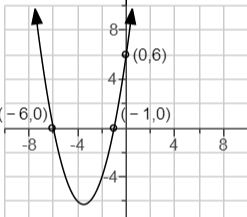
14. Solve:

15. Solve:

* + - Write equation of parabola in factored form given x-intercepts and another point.

**Example(s):**

16. Use the graph of the function to write equation in factored form:



17. Write an equation for a parabola with x-intercepts (-3,0) and (2,0) which passes through the point (1, -12)