

Section 4.1 (Day 1) Review of Quadratic Functions and Graphs

Warm-Up

You should recall that there are 3 things you can immediately find out about a quadratic function of the form $f(x)=ax^2 + bx + c$ just by looking at it:

1. That it is indeed in Standard Form.
2. Whether or not it is Concave Up or Concave down (the 'a' value tells you this).
3. What the y-intercept is (this will always be the ordered pair (0,c)).

For each of the following functions, state everything you can immediately find out about the function just by looking at it.

a) $f(x) = \frac{1}{3}x^2 - 3x + 7$

Form: Standard

Concave: Up or Down

y-int: (0, 7)

b) $f(x) = -x^2$

Form: Standard

Concave: Up or Down

y-int: (0, 0)

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c) $f(x) = -2x^2 + x - 22$

Form: Standard

Concave: Up or Down

y-int: (0, -22)