

Basic Skills 2

Identify the vertex.

1) $f(x) = x^2 + 4x + 12$

Identify the y-intercept.

2) $f(x) = x^2 - 14x + 59$

Identify the vertex.

3) $y = \frac{1}{2}(x - 4)^2 + 7$

Identify the y-intercept.

4) $f(x) = -(x - 7)^2 + 2$

Identify the x-intercepts.

5) $y = -\frac{2}{3}(x - 5)(x + 7)$

Identify the vertex.

6) $y = (x - 5)(x + 1)$

Find the value for $x = 4$.

7) $f(x) = 2x^2 + 32x + 134$

8) $f(x) = -(x + 9)^2 + 1$

Find the average rate of change for each

9) $(2,7)$ and $(-4,-1)$

State the increasing and decreasing intervals of the graph below.

10)

