

$$25 \qquad 30$$

$$s(t) = -16t^2 + 25t + 30 = 0$$

$$t = \frac{-25 \pm \sqrt{625 - 4(-16)(30)}}{-32}$$

$$v_0 = 200 \text{ m/s}$$

$$s = -4.9t^2 + 200t$$

$$v = -9.8t + 200 = 0$$

$$t = \frac{200}{9.8} = 20.4 \text{ s}$$

$$s(20.4) = -4.9(20.4)^2 + 200(20.4)$$

Sketching graphs with given limits (Ch. 2)

AP Calculus

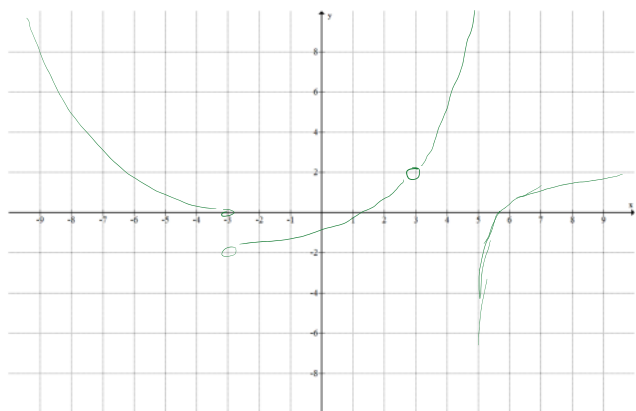
Name:

Sketch a graph that meets these limit conditions:

$$\lim_{x \rightarrow 2} f(x) = 2, \lim_{x \rightarrow 3^-} f(x) = 0$$

$$\lim_{x \rightarrow 3^+} f(x) = -2$$

$$\lim_{x \rightarrow 5^+} f(x) = -\infty$$



$$\lim_{x \rightarrow 0} f(x) = -3$$

$$\lim_{x \rightarrow 3} f(x) = 3$$

$$\lim_{x \rightarrow 3^+} f(x) = -3$$

$$\lim_{x \rightarrow 2^+} f(x) = \infty$$

$$\lim_{x \rightarrow 2^-} f(x) = \infty$$

