

PRACTICE QUIZ 11

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Time: 10 min

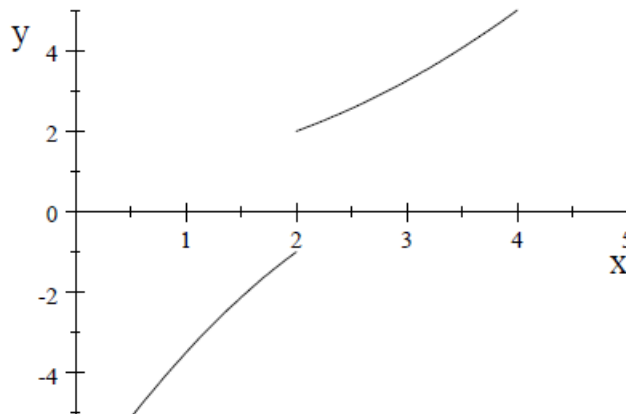
Time to beat: 3 min

Problem 1. A ball is thrown in the air with a velocity of 37. Its height after t seconds is given by $h(t) = 37t - 16t^2$.

- (a) Find the value of t when the ball attains its maximum height.
- (b) What is the instantaneous velocity at the time you found in part (a)?

Problem 2. Determine the limit $\lim_{x \rightarrow 36} \frac{\sqrt{x}-6}{x-36}$.

Problem 3. Consider the function f with the graph given below. Find the following limits



- (a) $\lim_{x \rightarrow 2^-} f(x)$
- (b) $\lim_{x \rightarrow 2^+} f(x)$
- (c) $\lim_{x \rightarrow 2} f(x)$