Last time, we spoke about

- Graphing using calculus
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- Horizontal asymptotes
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- Horizontal asymptotes
- Vertical asymptotes
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- Horizontal asymptotes
- Vertical asymptotes
- Role of the first/second derivative
... On the board.
Slanted asymptotes
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So then we know the function has a slanted asymptote

$$y = mx + b.$$
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- So we should find
  \[ \lim_{x \to \pm \infty} f'(x) = m \]
- We then know the function has a slanted asymptote \( y = mx + b \).
- To find \( b \):
  \[ b = \lim_{x \to \pm \infty} (f(x) - mx) \]
Example time

... On the board.