WEEK 3

- This is about that derivative stuff - Practice quiz on Tangent Lines to Functions (2 questions)

Practice quiz onTangent Lines to Functions
Teste para praticar • 10 min

✓ **Parabéns! Você foi aprovado!**

PARA SER APROVADO 75% ou superior

Continue aprendendo

NOTA
100%

Practice quiz onTangent Lines to Functions

NÚMERO TOTAL DE PONTOS 2

1. Suppose that $f : \mathbb{R} \to \mathbb{R}$ is a function. Which of the following expressions corresponds to $f'(2)$, the slope of the tangent line to the graph of $f(x)$ at $x = 2$?   **1 / 1 ponto**
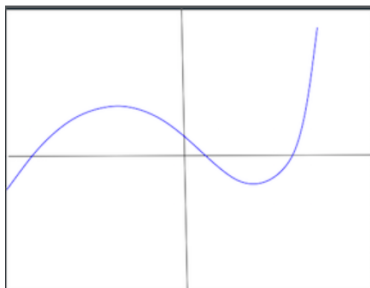
   ○ $f'(2) = \lim_{h \to 0} \frac{f(a+h) - f(a)}{h}$

   ○ $f'(2) = 2$

   ◉ $f'(2) = \lim_{h \to 0} \frac{f(2+h) - f(2)}{h}$

   ○ $f'(2) = mx + b$

   ✓ **Correto**
   This expression can be obtained from the first screen of our video by plugging in 2 for a.

2. Suppose that $h : \mathbb{R} \to \mathbb{R}$ is a function whose graph is shown as the blue curve in the figure. For how many values of a is $h'(a) = 0$?   **1 / 1 ponto**

   ○ 3

○ Never

○ Always

◉ 2

✓ **Correto**

$h'(a)$ gives the slope of the tangent line to the graph of h at the point $x = a$.

When $h'(a) = 0$, this means that the tangent line is horizontal.

There are two places (one on each side of the y-axis) where this tangent line is horizontal, so this answer is correct.