Practice quiz onTangent Lines to Functions

GESAMTPUNKTZAHL 2

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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 Punkten`
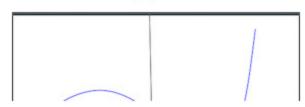
○ $f'(2) = 2$

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

> ✓ **Richtig**
>
> 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 Punkten`

○ 3

○ Never

○ Always

◉ 2

> ✓ **Richtig**
>
> $h'(a)$ 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.