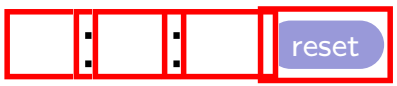
Wednesday 9/7 Bellwork (5 Minutes)

Find the slope of the tangent line to $f(x) = x^2$ at $(-2, 4)$ by approximating with secant lines.

$$P = (-2, 4), \ Q = (x, x^2)$$

$$m_{PQ} = \frac{x^2 - 4}{x - (-2)}$$



Exercise

1. Find the average velocity for the time period beginning when $t = 2$ and lasting

    1.

reset

Exercise

For each function, evaluate:

$$\frac{f(a+h)-f(a)}{h}$$

1. $f(x) = x^2 + 3x$
2. $f(x) = x + 2$
3. $f(x) = 2x$