



MTH 201 -- Calculus

Module 4A: Elementary derivative rules

September 28-29, 2020



Agenda for today

- Polling activity over Daily Preparation + Q&A time
- Activity: Computing and applying derivatives
- Recap: Polling questions
- Feedback time

If $y = f(x)$ is a function, then which of the following would be correct notation for its derivative? (Select all that apply)

$$\frac{y}{x}$$

$$\frac{d}{dx}$$

$$\frac{dy}{dx}$$

$$f'(x)$$



To 0

$$\frac{d}{dx} [3^2] =$$

0

3

3^3

$2 \cdot 3^1$

None of the above



To 0

If $y = x^{100}$, then $dy/dx =$

$$x^{99}$$

$$x^{100}$$

$$99x^{100}$$

$$100x^{99}$$



To

0

If $y = 5^x$, then $y' =$

$$5^x$$

$$x5^{x-1}$$

$$5^{x-1}$$

$$5^x \ln(5)$$

$$5^x \ln(x)$$



Group work on Jamboard

See the Campuswire links post for the link to your section and group

If $f(x) = 3x^3 + 2x^2 - 5x + 7$, then the slope of the tangent line to the graph of $f(x)$ at $x = 1$ is

0

8

18

$9x^2 + 4x - 5$

None of the above

