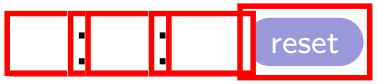
Bellwork 10/18

Find the equation for the line tangent to $f(x) = \frac{e^x}{x}$ at $x = 3$.



Bellwork 10/18 - Solution

$$f'(x) = \frac{xe^x - e^x}{x^2}$$

Point-Slope Form: $y - f(3) = f'(3)(x - 3)$

$$y = \left(\frac{3e^3 - e^3}{9}\right)(x - 3) + \frac{e^3}{3}$$

$$\boxed{y = \left(\frac{2e^3}{9}\right)x - \frac{e^3}{3}}$$

Exercise 1

Exercise 1 - Solution

Exercise 2

Exercise 2 - Solution

Exercise 3

Exercise 3 - Solution