Samples **Derivatives SOLUTIONS**

1. $y = -2e^x$, so

$$y' = -2e^x$$

2. $y = 3e^x - 3\ln x$, so

$$\begin{aligned} y' &= 3e^x - 3 \times \frac{1}{x} \\ &= 3e^x - \frac{3}{x} \end{aligned}$$

3. $y = -3e^x + 3\ln x$, so

$$\begin{aligned} y' &= -3e^x + 3 \times \frac{1}{x} \\ &= -3e^x + \frac{3}{x} \end{aligned}$$