3.2

(1) $f(x) = 2e^x + x^2$

$\boxed{f'(x) = 2e^x + 2x}$

Mistakes

- derivative of $e^x = e^x = \ln(e) \cdot e^x$

$$\downarrow$$
$$= 1$$

- $\frac{d}{dx}(2e^x) = 2\frac{d}{dx}(e^x) = 2e^x$