

#

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$$\begin{aligned} & f(g(x))' \text{ at } x=6 \\ &= f'(g(6)) \cdot g'(6) \\ &= f'(6) \cdot 3 \\ &= 4 \cdot 3 = 12 \end{aligned}$$

\int_0

$f(x)$

e

$$x = 4$$

$$e^{f(x)} \cdot f'(x)$$

$$e^{f(4)} \cdot f'(4) = e^0 \cdot 7 = 7$$

$$\textcircled{f} \quad g(\sqrt{x}) \quad \text{at} \quad x=16$$

$$g'(\sqrt{x}) \cdot \frac{1}{2\sqrt{x}}$$

$$g'(4) \cdot \frac{1}{8} = \frac{1}{16}$$

$$\begin{aligned} & \textcircled{82} f(2x + g(x)) \quad x=1 \\ & f'(2x + g(x)) \cdot (2 + g'(x)) \\ & f'(2 + g(1)) \cdot (2 + g'(1)) \\ & f'(6) \cdot (2 + 5) \\ & 4 \cdot 7 \\ & 28 \end{aligned}$$

$$(65) \quad y = \cos(t e^{-2t})$$

$$\frac{dy}{dt} = -\sin(t e^{-2t}) \cdot (1 e^{-2t} + -2t e^{-2t})$$