

Source:**1 | lamar chain rule****1.1 | 4**

$$\frac{\partial}{\partial w} \sqrt{w^3 + 8w^2} = \frac{(3w^2 + 16w)}{2\sqrt{w^3 + 8w^2}}$$

1.2 | 8

$$\frac{\partial}{\partial x} \tan(1 - 2e^x) = -2e^x \sec^2(1 - 2e^x)$$

1.3 | 9

$$\frac{\partial}{\partial z} \cos(\sin(z) + z^2) = -\sin(\sin x + x^2) (\cos x + 2x)$$

1.4 | 13

$$\frac{\partial}{\partial x} e^{12z - z^6} = \text{itself}$$

1.5 | 42

$$\frac{\partial}{\partial x}$$

1.6 | 43

$$\frac{\partial}{\partial x}$$