

**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**

1.4 | **13**

1.5 | **42**

1.6 | **43**