

$$w = \ln(x + 2y + 9z) \Rightarrow$$
$$\frac{\partial w}{\partial x} = \frac{1}{x + 2y + 9z}, \quad \frac{\partial w}{\partial y} = \frac{2}{x + 2y + 9z}, \quad \frac{\partial w}{\partial z} = \frac{9}{x + 2y + 9z}$$