Derivative of \( y \) with Respect to \( x \) Examples with SimBraille

1. The derivative of \( y \) with respect to \( x \) which is represented by open fraction \( \frac{dy}{dx} \) close fraction is written
   \[
   \frac{dy}{dx}
   \]

2. Open fraction \( \frac{dy}{dx} \) close fraction equals two \( x \) plus four is written
   \[
   \frac{dy}{dx} = 2x + 4
   \]

3. The second derivative of \( y \) with respect to \( x \) which is represented by open fraction \( \frac{d^2y}{dx^2} \) close fraction is written
   \[
   \frac{d^2y}{dx^2}
   \]
4. The nth derivative of y with respect to x which is represented by open fraction d to the nth power y over dx to the nth power close fraction is written
\[
\frac{d^n y}{dx^n}
\]