

Name: _____

Date: _____

Learning Goal 3.3	Using more derivative rules.
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Explicit Functions/Relations**vs****Implicit Functions/Relations**

Example Differentiate $x^2 + y^2 = 25$, then determine the slope of the tangent line at the point $(3, -4)$,

a. Using an explicit function

b. Using an implicit function

Example Differentiate $2y^5 + x^2y^2 = x$.

Example Find $\frac{dy}{dx}$ if $y = x^{x^2+5x}$.

Example Find $\frac{dy}{dx}$ if $y = (x^2 + 1)(3x + 2)^5$.