2.6 Videos Guide

2.6a

- Two ways to find $\frac{dy}{dx}$ for $x^2 + y^2 = 25$

2.6b

Exercises:

- Find $\frac{dy}{dx}$ by implicit differentiation.
  - $y^5 + x^2y^3 = 1 + x^4y$
  - $\cos(xy) = 1 + \sin y$

2.6c

  - $xy = \sqrt{x^2 + y^2}$
- Find y'' by implicit differentiation. Simplify where possible.
  $x^3 - y^3 = 7$