

## 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.  
 $x^3 - y^3 = 7$