Implicit Differentiation

Q: When might we need this?

A: When it is difficult to solve for one variable in terms of the other.

**Examples:**

1. Find for 

2. Find the line of tangency and normal line to the curve at the point (-1, 2).

3. Find the instantaneous rate of change at (1,1) for 

4. \*\* If , what is the value of at the point (4, 3)?

Calculate the derivative with respect to x.

5.  6. 

Steps to solve an implicit differentiation problem: