# Chapter 11 – 4a The Chain Rule

**Example 1.** Find the derivative of

### The Chain Rule

Suppose and . The function is called a composite function (a function whose argument is another function). The derivative of a composite function can be found using the chain rule:

**Example 2.** Find the derivative of

## General Power Rule

This result is known as the general power rule.

**Example 3.** Find the derivative of using the general power rule.

and

**Example 4.** Find the derivative of

**Example 5.** Find the derivative of

**Example 6.** Find the derivative of

and

**Example 7.** Find the derivative of

**Example 8.** Find the derivative of