

# Objectives

*List of objectives for Module 10M - Modeling with Power Functions.*

In the last Module, we focused on modeling with linear functions. These models had a **constant** rate of change, which is how we identified the need for a linear model. In this Module, we'll focus on models that have a **varying** rate of change. We will use polynomials, radical, and rational functions to model these relationships. These are all known as *Power Functions* as they describe a function using powers of  $x$ .

The objectives for this Module are:

- (a) Identify when two quantities are varying directly with each other.
- (b) Identify when two quantities are varying indirectly with each other.
- (c) Construct a model equation for the real-life situation.