

Goal:

- identify different types of functions from their graph or written context:

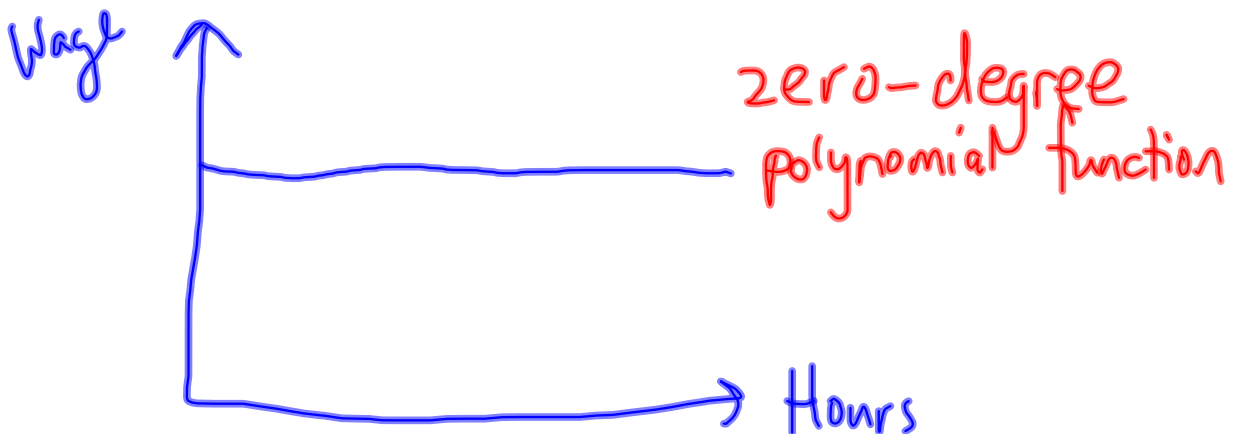
- zero-degree polynomial (constant)
 - first-degree polynomial (linear)
 - second-degree polynomial (quadratic)
 - Inverse variation (rational)
 - exponential
 - step
 - periodic
 - piecewise
- last year*
- New*

Functions can be classified by their type and recognizing the type of function is the first step in modelling a situation.

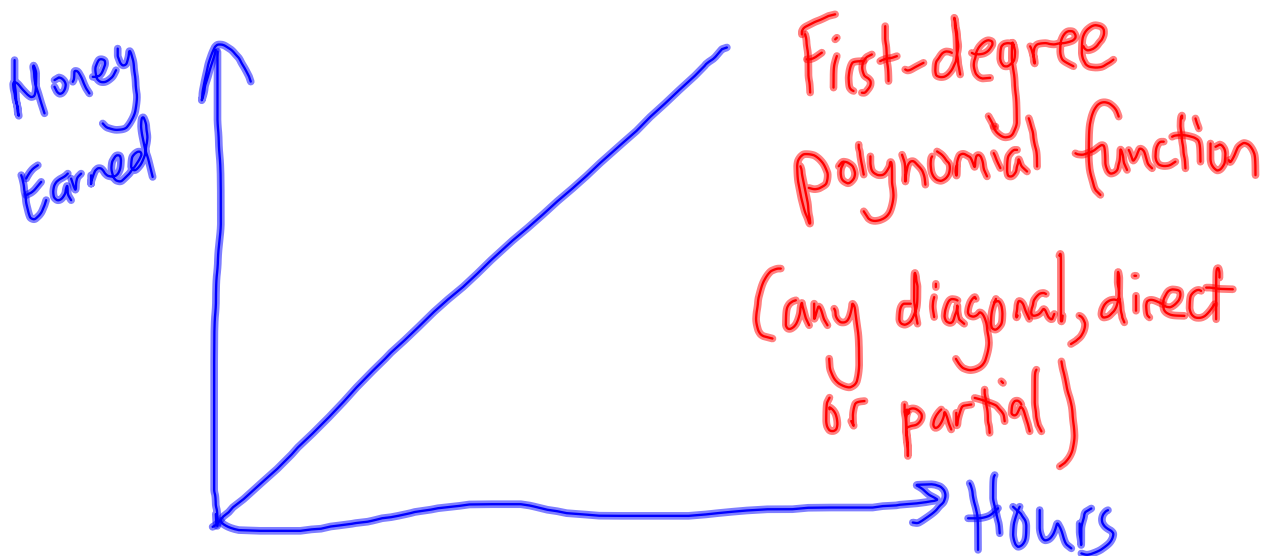
The type of function can be determined by looking at a graph or sketch of the function.

First, let's look at four examples from last year.

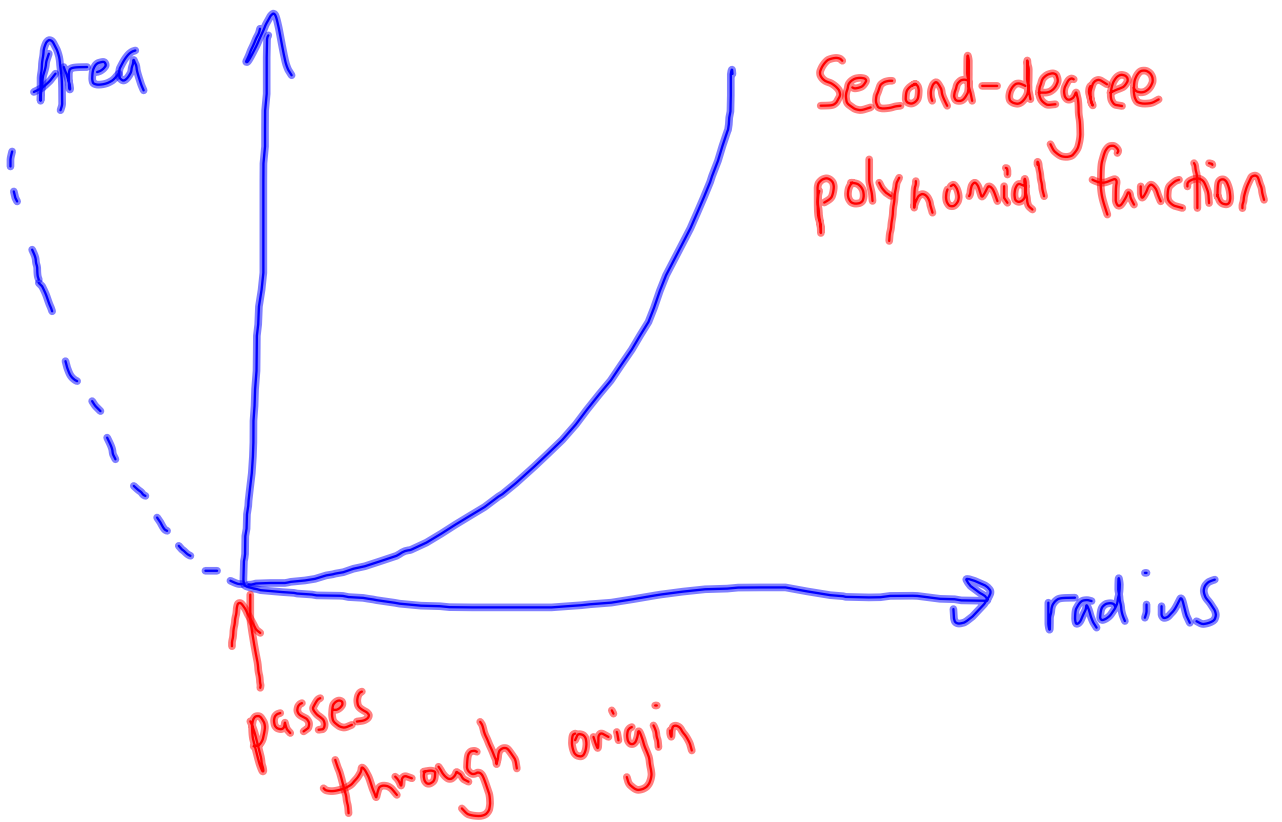
Ex: a) An employee's hourly wage compared to the number of hours worked.



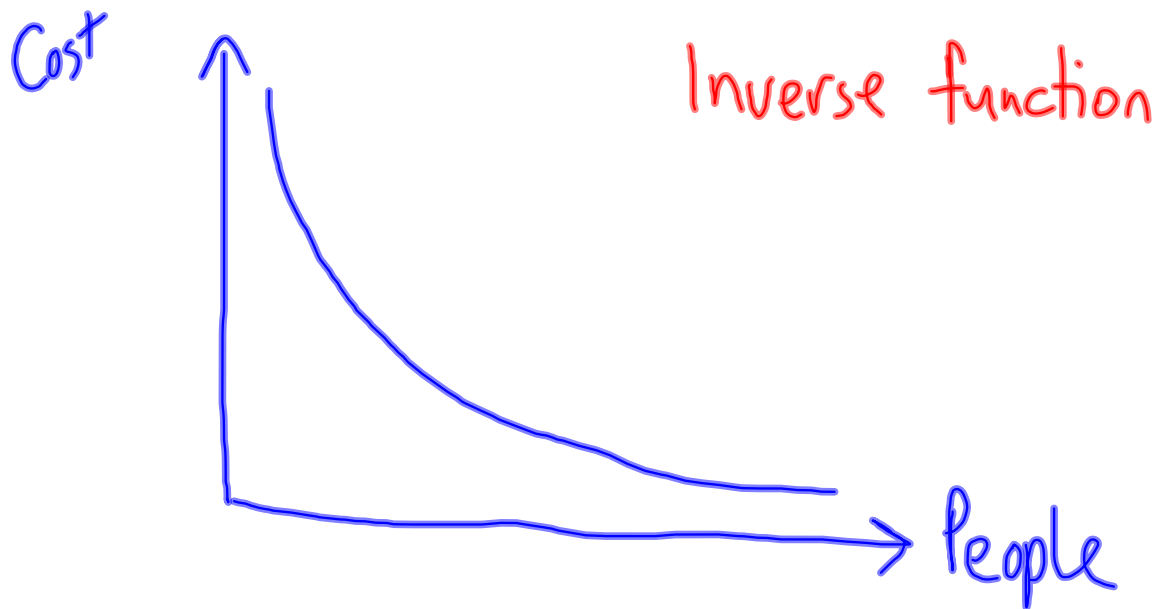
b) An employee's salary for the week compared to the number of hours they worked.



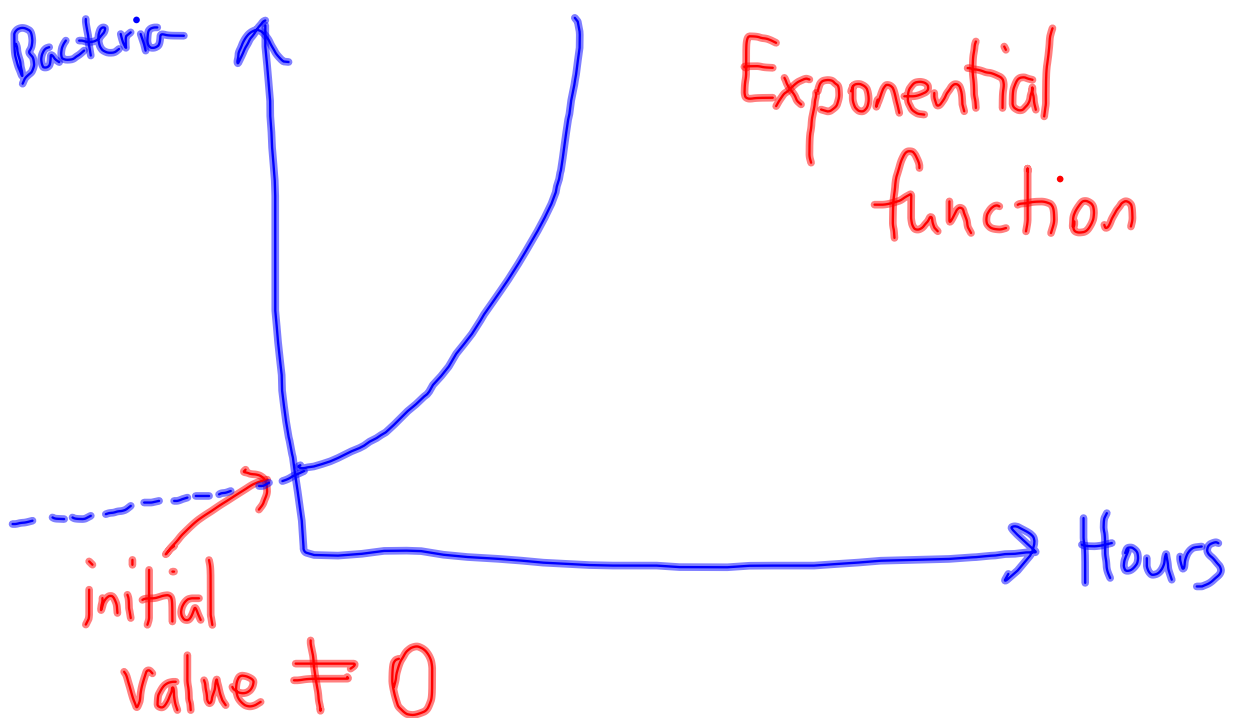
c) The area of a circle compared to its radius.



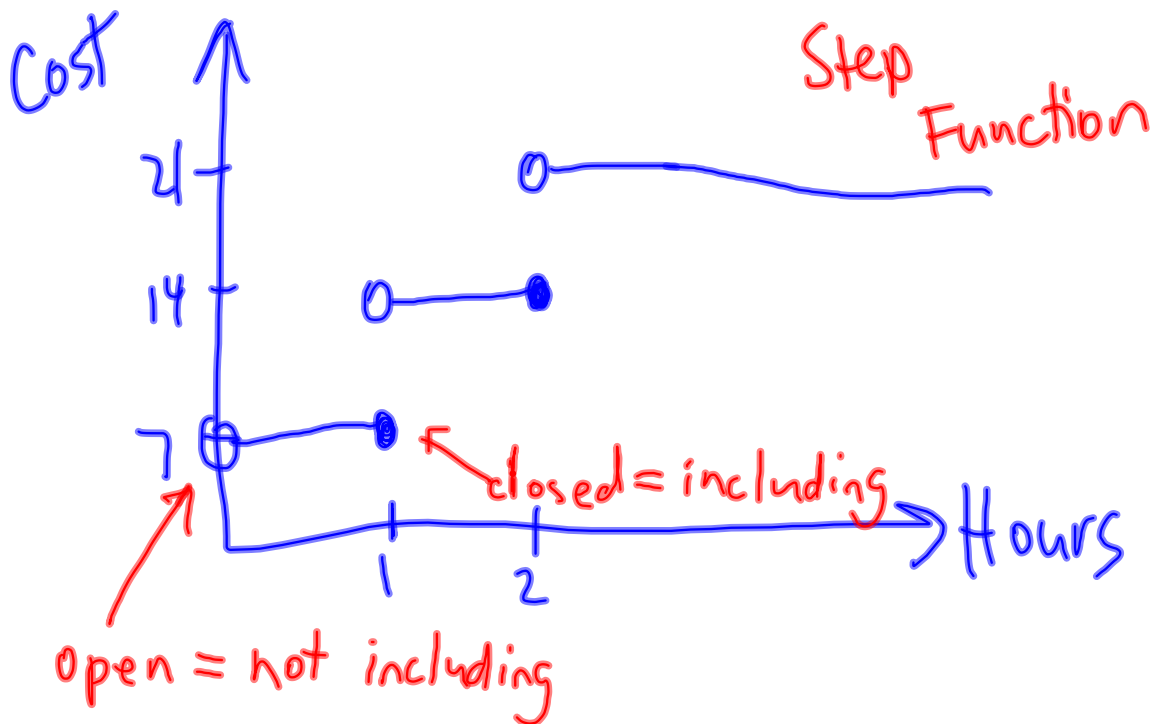
d) The cost of sharing a pizza per person compared to the number of people sharing the pizza.



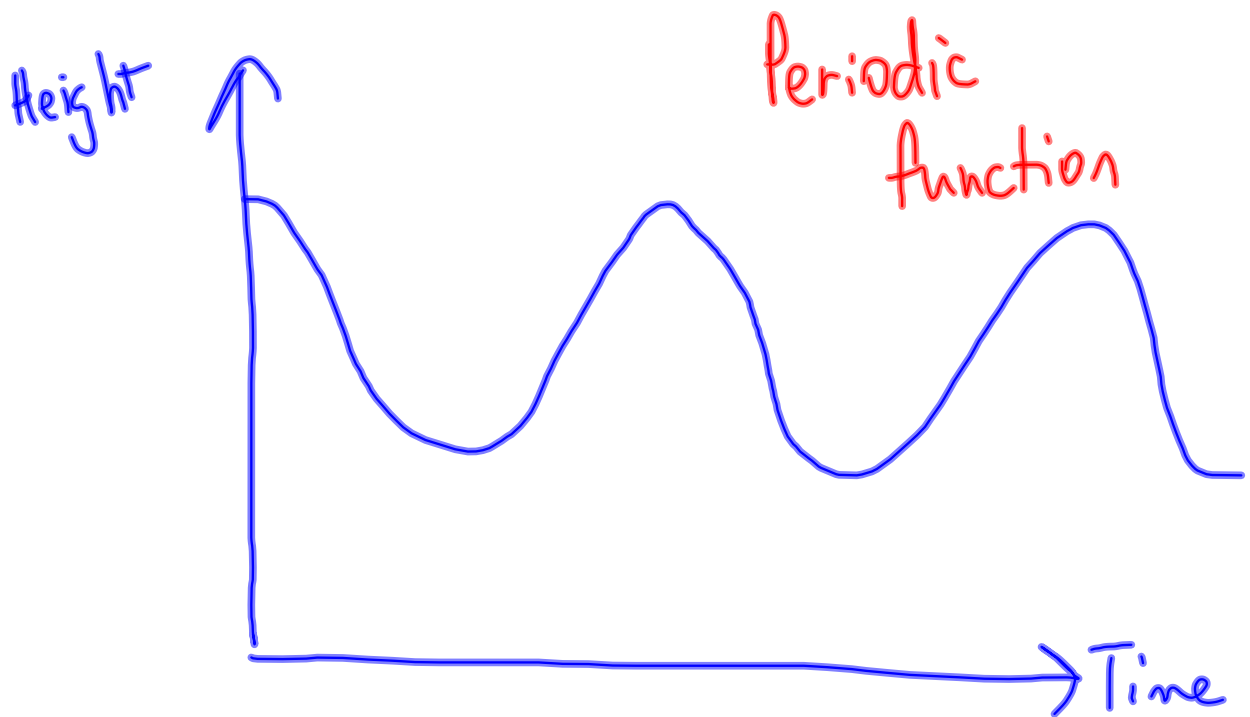
e) The number of bacteria in a culture compared to the number of hours since growth began.



f) The cost of parking a car in a parking garage compared to the number of hours parked.



g) The height of the tides compared to time.



h) The temperature outside compared to time.

