

INDEPENDENT AND DEPENDENT VARIABLES

6<sup>th</sup>

### INDEPENDENT V. DEPENDENT

Controlled

Vary at known rate

Cause

X values

Input

Measured

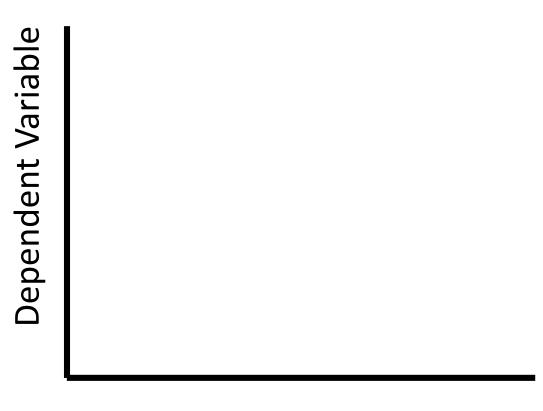
Vary at unknown rate

**Effect** 

Y values

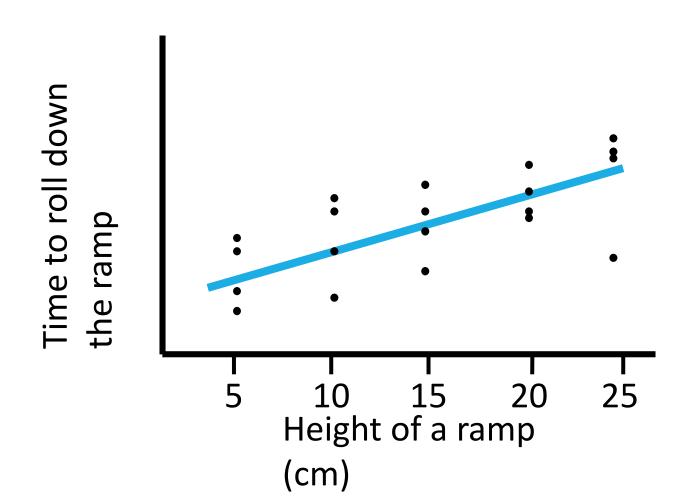
Output

### GRAPHING DEPENDENT V. INDEPENDENT VARIABLES



Independent Variable

## Example



# Example 2B: Identifying Independent and Dependent Variables

Identify the independent and dependent variables in the situation.

The height of a candle decrease *d* centimeters for every hour it burns.

The height of a candle depends on the number of hours it burns.

Dependent: height of candle

Independent: time

# Example 2A: Identifying Independent and Dependent Variables

Identify the independent and dependent variables in the situation.

A painter must measure a room before deciding how much paint to buy.

The amount of paint depends on the measurement of a room.

Dependent: amount of paint

Independent: measurement of the room

#### **Check It Out! Example 2a**

Identify the independent and dependent variable in the situation.

A company charges \$10 per hour to rent a jackhammer.

The cost to rent a jackhammer depends on the length of time it is rented.

Dependent variable: cost

Independent variable: time

#### **Check It Out! Example 2b**

Identify the independent and dependent variable in the situation.

Camryn buys *p* pounds of apples at \$0.99 per pound.

The cost of apples depends on the number of pounds bought.

Dependent variable: cost

Independent variable: pounds