

Directions: Finish filling in the variable chart below.

| Independent Variable | Dependent Variable |
|----------------------|---------------------|
| Cause | |
| | After |
| Input | |
| What I did | |
| Manipulated Variable | Responding Variable |

INDEPENDENT VARIABLE



What I CHANGE



DEPENDENT VARIABLE

What I OBSERVE



CONTROLLED VARIABLE

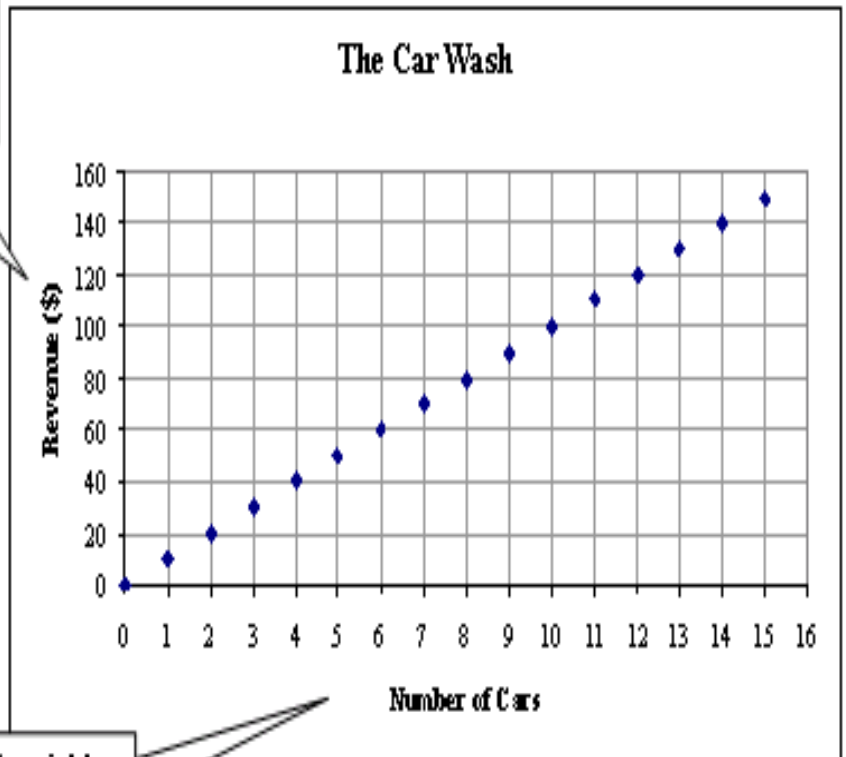
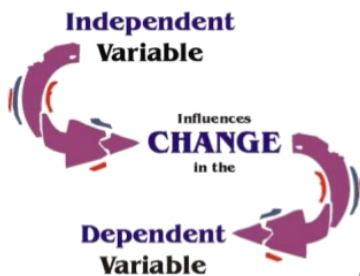
What I KEEP THE SAME

Example 1

Dependent variable –
The amount of money raised **depends** on the number of cars washed.

Independent (X) vs. Dependent (Y) Variables

- **Independent variable (X)** = the 'cause.' Variable that influences.
- **Dependent variable (Y)** = the 'effect.' Variable that is *influenced* by the cause; it is *dependent* on the cause.
- **INCA:** the *IN*dependent variable is the *CA*use.



Independent variable
- the number of cars washed

Name _____

Date _____

Read each question below.

Determine the Independent and Dependent Variables.

Scenario 1:

How much water flows through a faucet with differently sized openings?

**Think of a water hose with a restrictor valve.*

Independent: _____

Because: _____

Dependent: _____

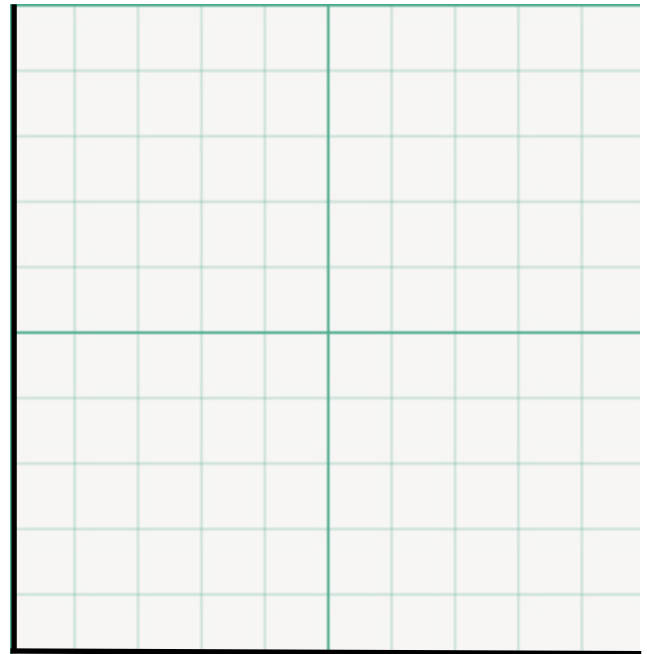
Because: _____

* Choose your own values to graph.

EX: 1,2,3, Cm openings and 1,2,3 Gallons of water.

__-axis

-- -- --



__-axis

-- -- --

Scenario 2:

Does heating a cup of water allow it to dissolve more sugar?

Independent: _____

Because: _____

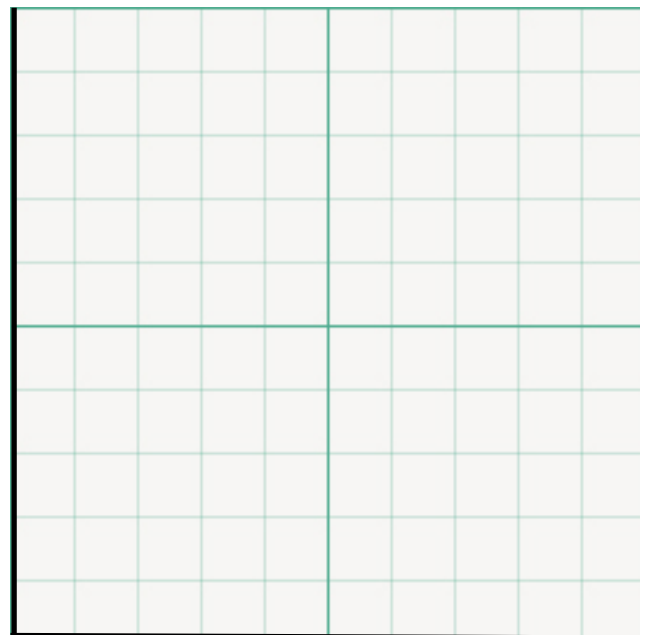
Dependent: _____

Because: _____

* Choose your own values to graph.

__-axis

-- -- --



__-axis

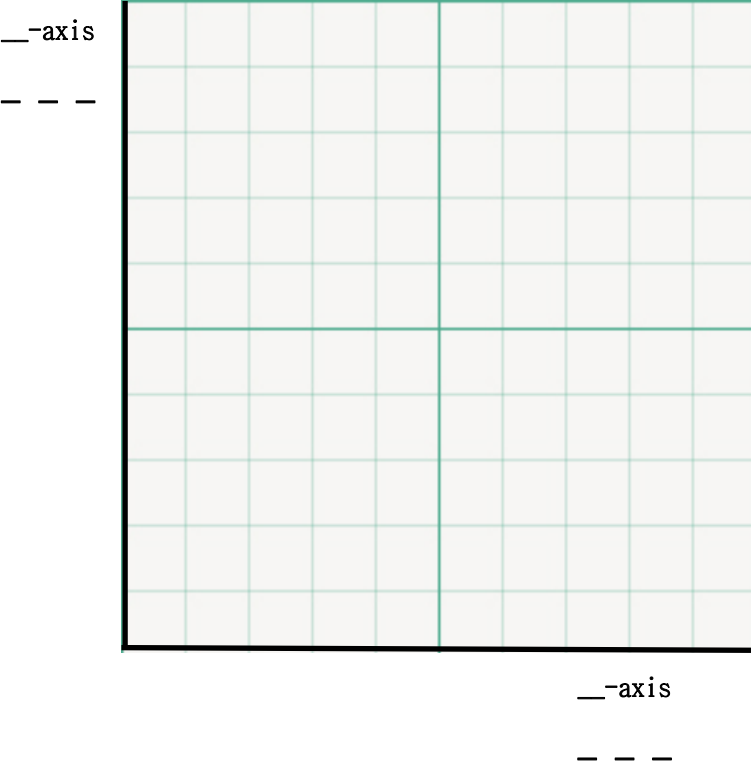
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Scenario 3:
Does fertilizer make a plant grow bigger?

Independent: _____
Because: _____

Dependent: _____
Because: _____

* Choose your own values to graph.

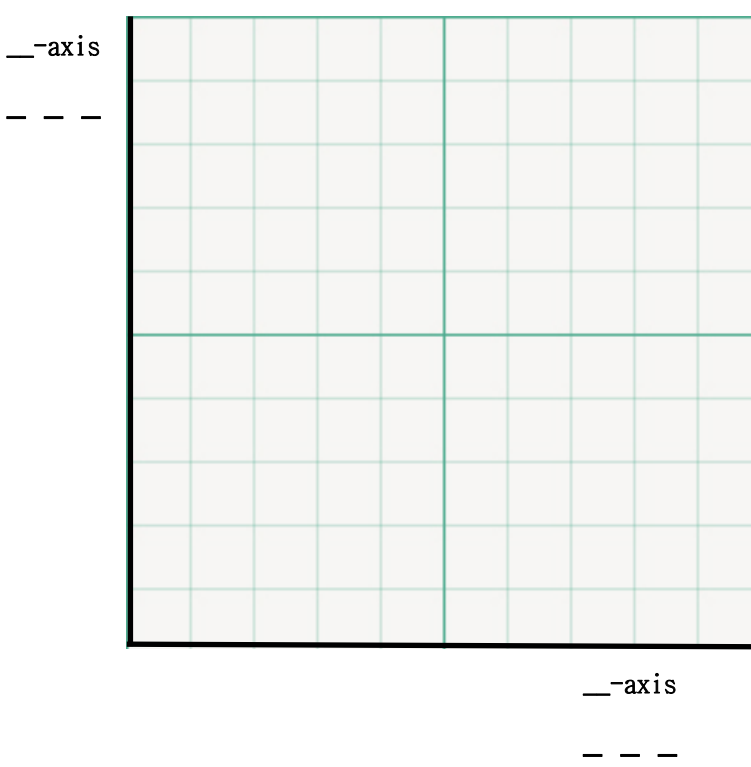


Scenario 4:
Does an electric motor turn faster if you increase the voltage?

Independent: _____
Because: _____

Dependent: _____
Because: _____

* Choose your own values to graph.



Scenario 5:
Who listens to music the most: teenagers
or their parents?

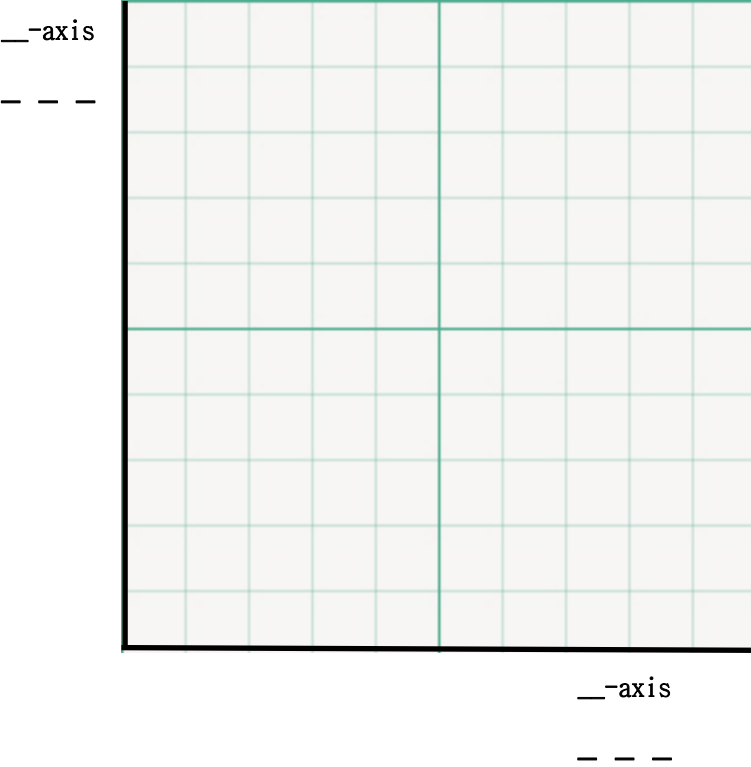
Independents (2): _____

Because: _____

Dependent: _____

Because: _____

* Choose your own values to graph.



Scenario 6:
Is a classroom noisier when the teacher
leaves the room?

Independents (2): _____

Because: _____

Dependent: _____

Because: _____

* Choose your own values to graph.

