



Assignment: Graphing Practice

Complete the following questions and graphing for each of the situations below.

- Hookworms live in the human intestine drinking the blood it sucks from the intestine wall. It is estimated that a single hookworm can drink 0.5 cm^3 of blood per day.

Number of hookworms in the intestine	Amount of blood lost per day in cm^3
20	15
40	35
60	50
80	70
100	85
120	110
140	130

- What is the dependent variable? What is the independent variable?
- How many cm^3 of blood will be lost by a person containing 88 hookworms in a week?

- Ethylene is a plant hormone that causes fruit to mature. The data above concerns the amount of time it takes for fruit to mature from the time of the first application of ethylene by spraying a field of trees.

Amount of ethylene in mL/m^2	Wine sap Apples: Days to Maturity	Golden Apples: Days to Maturity	Gala Apples: Days to Maturity
10	14	14	15
15	12	12	13
20	11	9	10
25	10	7	9
30	8	7	8
35	8	7	7

- What is the dependent variable? What is the independent variable?
- How much ethylene (mL/m^2) is needed to have the apples reach maturity in 5 days?

- The thickness of a tree's annual rings indicates what type of environmental situation was occurring at the time of its development. A thin ring usually indicates a rough period of development. Lack of water, forest fires, or a major insect infestation. On the other hand, a thick ring indicates just the opposite.

Age of the tree in years	Average thickness of the annual rings (cm) Forest A	Average thickness of the annual rings (cm) Forest B
10	2.0	2.2
20	2.2	2.5
30	3.5	3.6
35	3.0	3.8
50	4.5	4.0
60	4.3	4.5

- What is the dependent variable? What is the independent variable?
- What was the average thickness of the annual rings of 40 year old trees in Forest A?
- Based on this data, what can you conclude about Forest A and Forest B?