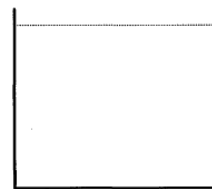
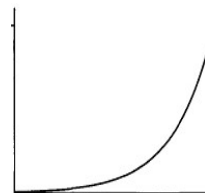


# Dealing With Data: Questions

## Part 1: Multiple Choice

- In the graph at right, as the independent variable increases, the dependent variable:  
A. increases linearly  
B. increases exponentially  
C. increases at an increasing rate  
D. increases at a decreasing rate
- The independent variable is typically shown on the:  
A. horizontal axis  
B. vertical axis  
C. line of best fit  
D. curve of best fit
- The graph at right demonstrates \_\_\_\_\_ relationship between the variables.  
A. a constant  
B. an inverse  
C. a linear  
D. no
- Interpretations of graphs belong in which section of a lab report?  
A. Procedure  
B. Observations  
C. Discussion and/or Conclusion
- The graphs in a lab report should be drawn:  
A. by hand  
B. on a computer  
C. either A or B, provided they are drawn neatly



## Part 2: Problem Solving

- For each of the Questions below, prepare a table that could be used to record the data. Include possible values for the independent variable.  
(a) “What effect does the temperature of the reactants in a chemical reaction have on the rate of the reaction?”  
(b) “What happens to the current through a circuit when the resistance of the circuit is changed?”
- Graph the data in the following table. Mass is the independent variable.

Table 1: Frictional Force Between an Object and a Surface for Different Masses of the Object

|                      |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|
| Mass (kg)            | 0.500 | 1.000 | 1.500 | 2.000 | 2.500 |
| Frictional Force (N) | 1.5   | 2.9   | 4.4   | 5.9   | 7.4   |

- Graph the data in the following table. Height is the independent variable.

Table 2: Time Taken for an Object Dropped from Different Heights to Fall

|            |      |      |      |      |       |
|------------|------|------|------|------|-------|
| Height (m) | 2.00 | 4.00 | 6.00 | 8.00 | 10.00 |
| Time (s)   | 0.6  | 0.9  | 1.1  | 1.3  | 1.4   |

- From the graphs, write a conclusion relating the independent and dependent variables.