Lesson 1 Assignment

Graphing Skills

Work slowly and carefully. If you are having difficulty, go back and review the appropriate *Lesson*.

For full marks, show all calculations, steps, and/or explain your answers.

Total marks: 20

(3) 1. The higher the temperature of the oven, the faster the cake will bake. Write the letter of the correct statement to finish the following sentences.

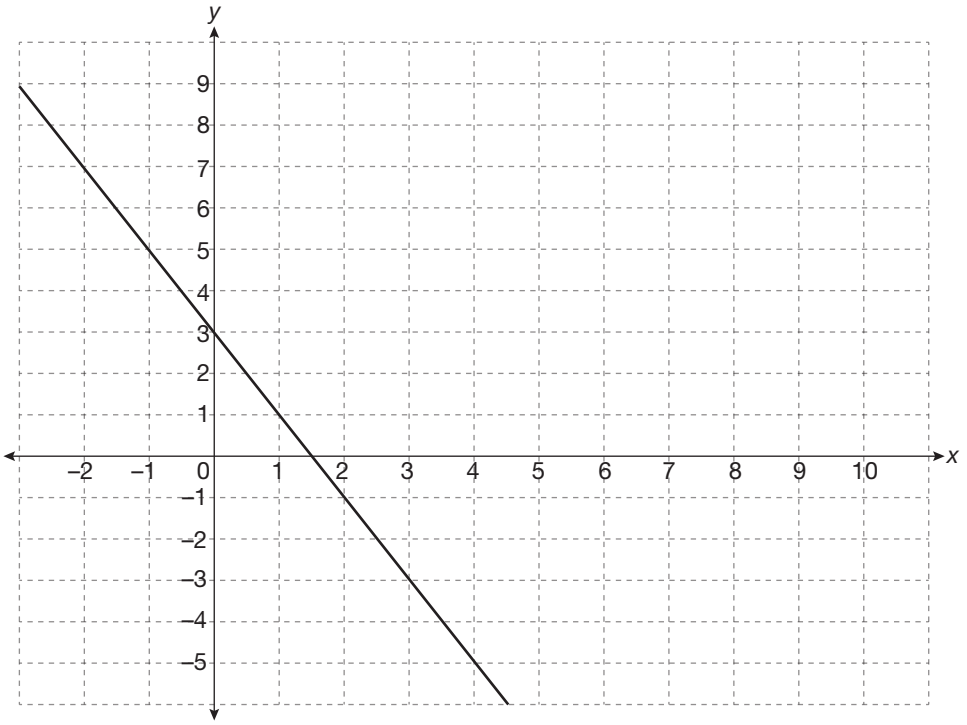
A – the dependent variable
B – the independent variable
C – neither

a. The temperature of the oven is _____.

b. The oven is _____.

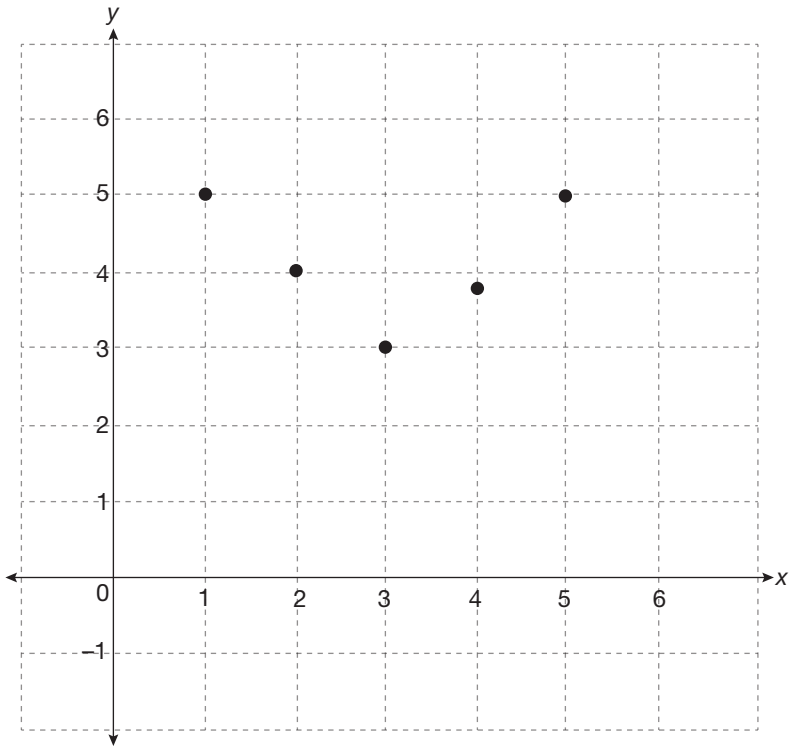
c. The baking time of the cake is _____.

(1) _____ 2. The graph below is an example of which of the following?



A. a linear relation and continuous data
B. a non-linear relation and continuous data
C. a linear relation and discrete data
D. a non-linear relation and discrete data

(1) _____ 3. The graph below is an example of which of the following?



A. a linear relation and continuous data
B. a non-linear relation and continuous data
C. a linear relation and discrete data
D. a non-linear relation and discrete data

(1) _____ 4. Students measured the temperature of water at different depths in Beaverhill Lake and found that the temperature varied according to the depth at which it was taken. The maximum depth of the lake is $7.5\ \text{ft}$. Which of the following best describes this data?

A.

dependent variable: temperature
independent variable: depth
continuous data

B.

dependent variable: temperature
independent variable: depth
discrete data

C.

dependent variable: depth
independent variable: temperature
continuous data

D.

dependent variable: depth
independent variable: temperature
discrete data

5. The amount of juice produced from oranges is displayed in the table of values.

Number of Oranges	3	4	5	6	7
Volume of Juice (mL)	175	300	500	625	800

(1) a. Identify the dependent variable and the independent variable.

(1) b. Is the data discrete or continuous? Explain.

(5) c. Graph the data.
Be sure to include
- an appropriate scale
- the labelled axes (including units)
- the dependent variable on the y-axis and the independent variable of the x-axis
- a title
- a line connecting points when applicable (continuous: yes, discrete: no)

(1) d. Does the graph represent a linear relation? Justify.

6. Juanita owns an aluminum recycling company and purchases used aluminum cans for $\$0.50$ per pound.

(1) a. Complete the table of values.

Mass of Aluminum (lb)	Cost $(\$)$
10	
20	
30	
40	

(5) b. Graph the data.
Be sure to include
- an appropriate scale
- the labelled axes (including units)
- the dependent variable on the y-axis and the independent variable on the x-axis
- a title
- a line connecting points when applicable (continuous: yes; discrete: no)