## Topic No. 02


\#1

## 1. Which of the below correctly describes this graph?

(a) It is a function; it passes the vertical line test.
(b) It is not a function; it fails the vertical line test.
(c) It is both a function and not a function.
(d) It is not a function now, but will be one later.

2. Which of the below correctly describes this graph?
(a) It is a function; it passes the vertical line test.
(b) It is not a function; it fails the vertical line test.
(c) It is both a function and not a function.
(d) It is not a function now, but will be one later.

3. Which of the below correctly describes this graph?
(a) It is a function; it passes the vertical line test.
(b) It is not a function; it fails the vertical line test.
(c) It is both a function and not a function.
(d) It is not a function now, but will be one later.

4. Which of the below correctly describes this graph?
(a) It is a function; it passes the vertical line test.
(b) It is not a function; it fails the vertical line test.
(c) It is both a function and not a function.
(d) It is not a function now, but will be one later.


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5. Which of the below correctly describes this graph?
(a) It is linear.
(b) It is non-linear.
(c) It is both linear and non-linear.
(d) It is not linear now, but will be linear later.

6. Which of the below correctly describes this graph?
(a) It is linear.
(b) It is non-linear.
(c) It is both linear and non-linear.
(d) It is not linear now, but will be linear later.

7. Which of the below correctly describes this equation?
(a) It is linear.
(b) It is non-linear.

$$
y=x^{2}
$$

(c) It is both linear and non-linear.
(d) It is not linear now, but will be linear later.
8. Which of the below correctly describes this equation?
(a) It is linear.
(b) It is non-linear.

$$
y=3 x-5
$$

(c) It is both linear and non-linear.
(d) It is not linear now, but will be linear later.

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## 9. Consider the data sets below:

Data Set Q

| $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: |
| 5 | 20 |
| 10 | 25 |
| 5 | 30 |
| 10 | 35 |
| 5 | 40 |

Data Set R

| $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: |
| 10 | 5 |
| 20 | 4 |
| 30 | 5 |
| 40 | 4 |
| 50 | 5 |

Which of these statements correctly describes this data set?
(a) Data Set Q is a function. Data Set R is not a function. It is OK to repeat $X$ values, but not OK to repeat $Y$ values.
(b) Data Set Q is not a function. Data Set R is a function. It is OK to repeat $Y$ values, but not OK to repeat X values.
(c) Both Data Set Q and Data Set R are functions. It is OK to repeat both Y values and X values.
(d) It is impossible to tell which ones are functions.

