

MODULE 1

LESSON 1

QUIZ

1. Question. Which of the following DO NOT describe relations?

A. $y = \frac{1}{x+1}$.

B. $\{(2, 3), (2, 2), (5, 2), (3, 17)\}$.

C. $x^4 + y^4 = 17$.

D. $\{(5, 1), (6, 8), 2, (1, 3)\}$.

E. First person is a sister of the second person.

F. $x - 5$.

G. $\{-1, 2\}$.

H. $\{(x, y) \mid 2x < y < 5x + 1\}$.

I. $\{(x, y) \mid x \neq y\}$.

J.

x	1	3.2	5	4.1	6.5	1.1	1	2	5
y	.01	-2	3.2	5	6.5	0	1	2	5

Go to answer 1

2. Question. Which of the following sets defines a relation which relates 5 to 1?

A. $\{(3, 1), (2, 2), (1, 5), (3, 4)\}$

B. $\{(3, 2), (3, 3), (7, 4), (5, 1)\}$

C. $\{(4, 3), (2, 2), (6, 5), (4, 3)\}$

D. $\{5, 1, 4, 2, 3\}$

Go to answer 2

3. Question. Which of the following is true about the relation defined by the following set of pairs

$$\{(2, 3), (1, 1), (4, 1), (7, 3), (3, 6), (0, 1)\}?$$

A. This is a relation between the elements of the set $\{1, 2, 3, 4, 5, 6, 7\}$.

B. 3 is related to 7.

C. 2 is to 3 and 1 is related to itself.

D. 2 is to 3 and 1 is related to 0.

Go to answer 3

4. Question. We say that " a number x is related to a number y if x and y are both even or both odd". Which of the following sets of pairs describes the above relation.

A. $\{(x, y) | x - y \text{ is even}\}$

B. $\{(x, y) | x - y \text{ is odd}\}$

C. $\{(x, y) | x - y \text{ is either even or odd}\}$

D. $\{(x, y) | x = 1, 3, 5, \dots, y = 1, 3, 5, \dots\}$

Go to answer 4

5. Question. A relation is described by the equation $3x + 5y = 21$. Which of the following numbers are related?

A. 1 and 3

B. 7 and 0

C. 3 and 2

D. all positive numbers

Go to answer 5

1. Answer to Question 1: D, F and G only.

Go back 1

2. Answer to Question 2: "B".

Go back 2

3. Answer to Question 3: "C".

Go back 3

4. Answer to Question 4: "A".

Go back 4

5. Answer to Question 5: "B".

Go back 5