แบบฝึกหัดเรื่องการเป็นฟังก์ชัน หน่วยการเรียนรู้เรื่อง ฟังก์ชัน วิชาคณิตศาสตร์เพิ่มเติม (ค30202)

ชื่อ.....ชั้นมัธยมศึกษาปีที่ 4/ .....เลขที่.....

จงพิจารณาว่าความสัมพันธ์ต่อไปนี้เป็นฟังก์ชันหรือไม่

1) $r_1 = \{(1 , a) , (2 , a) , (3 , a) , (4 , a)\}$ _____

2) $r_2 = \{(1 , 2) , (2 , 3) , (3 , 4) , (4 , 5)\}$ _____

3) $r_3 = \{(a , a) , (b , b) , (c , c) , (d , d)\}$ _____

4) $r_4 = \{(1 , 2) , (1 , 3) , (2 , 4) , (2 , 5)\}$ _____

5) $r_5 = \{(a , 1) , (a , 2) , (a , 3) , (a , 4)\}$ _____

6) $r_6 = \{(x , 2) \mid x \in I\}$ _____

7) $r_7 = \{(1 , a) \mid a \in R\}$ _____

8) $r_8 = \{(x , y) \in R \times R \mid 2x + 3y = 6\}$ _____

9) $r_9 = \{(x , y) \in N \times N \mid x + y = 7\}$ _____

10) $r_{10} = \{(x , y) \in A \times A \mid y = 2x + 1\}$ เมื่อ $A = \{-2 , -1 , 0 , 1 , 2\}$ _____

11) $r_{11} = \{(x , y) \in A \times A \mid y = x^2\}$ เมื่อ $A = \{1 , 2 , 3\}$ _____

12) $r_{12} = \{(x , y) \in A \times A \mid x = y^2\}$ เมื่อ $A = [0 , 100]$ _____

13) $r_{13} = \{(x , y) \in R \times R \mid 2y = 5\}$ _____

14) $r_{14} = \{(x , y) \in R \times R \mid x + 5 = 0\}$ _____

15) $r_{15} = \{(x , y) \in N \times N \mid$ ห.ร.ม. $(x , y) = 1\}$ _____

16) $r_{16} = \{(x , y) \in R \times R \mid (x - y)(x^2 + xy + y^2) = 0\}$ _____

17) $r_{17} = \{(x , y) \in R \times R \mid x^2 + 2x - 8 = 0\}$ _____

18) $r_{18} = \{(x , y) \in R \times R \mid x^2 + y^2 - 6x + 4y + 13 = 0\}$ _____

19) $r_{19} = \{(x , y) \in R \times R \mid x = y^3 - 3y + 5\}$ _____

20) $r_{20} = \{(x , y) \in R \times R \mid x^3 + x^2y + xy + y^2 = 0\}$ _____

21) $r_{21} = \{(x , y) \in R \times R \mid x^3 + xy = x^2y^2 + y^3\}$ _____

22) $r_{22} = \{(x , y) \in R \times R \mid y = 2|x + 1| - 3\}$ _____

23) $r_{23} = \{(x,y) \in R \times R \mid y = ||x| - 2|\}$

24) $r_{24} = \{(x,y) \in R \times R \mid y = ||x - 1| - 3|\}$

25) $r_{25} = \{(x,y) \in R \times R \mid x + |y| = 2\}$

26) $r_{26} = \{(x,y) \in R \times R \mid |x| + |y| = 3\}$

27) $r_{27} = \{(x,y) \in R \times R \mid |x - 1| + |y + 2| = 4\}$

28) $r_{28} = \{(x,y) \in R \times R \mid |x + y| = 5\}$

29) $r_{29} = \{(x,y) \in R \times R \mid y = \frac{1}{xy}\}$

30) $r_{30} = \{(x,y) \in R \times R \mid y = \sqrt{9 - x^2}\}$

31) $r_{31} = \{(x,y) \in N \times N \mid |y| = |x|\}$

32) $r_{32} = \{(x,y) \in R \times R^+ \mid |y| = 2x\}$

33) $r_{33} = \{(x,y) \in N \times N \mid |y| = |x|\}$

34) $r_{34} = \{(x,y) \in R \times R^+ \mid y^2 - x^2 = 1\}$

35) $r_{35} = \{(x,y) \in R \times R \mid x^2 + y^2 = 4\}$

36) $r_{36} = \{(x,y) \in R \times R \mid x^2 + y^2 = 4 \text{ เมื่อ } x \geq 0\}$

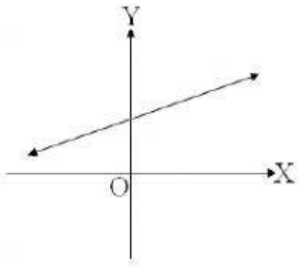
37) $r_{37} = \{(x,y) \in R \times R \mid x^2 + y^2 = 4 \text{ เมื่อ } y \geq 0\}$

38) $r_{38} = \left\{(x,y) \in R \times R \mid y = \begin{cases} 2x + 1 \text{ เมื่อ } x \leq 0 \\ x^2 + 5 \text{ เมื่อ } x \geq 0 \end{cases}\right\}$

39) $r_{39} = \left\{(x,y) \in R \times R \mid y = \begin{cases} 3x \text{ เมื่อ } x \leq 3 \\ x^2 \text{ เมื่อ } x \geq 3 \end{cases}\right\}$

40) $r_{40} = \left\{(x,y) \in R \times R \mid x = \begin{cases} y \text{ เมื่อ } y < 0 \\ y^2 \text{ เมื่อ } x \geq 0 \end{cases}\right\}$

41)



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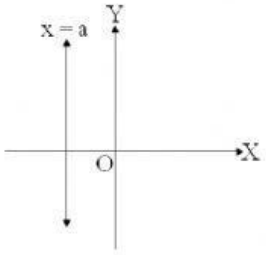

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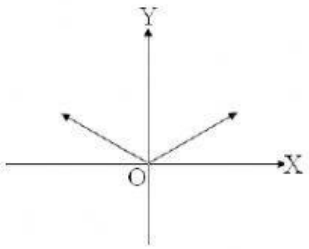

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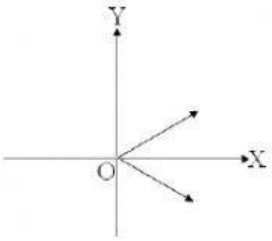

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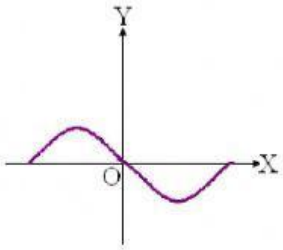

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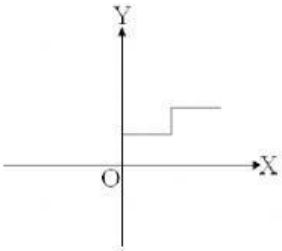

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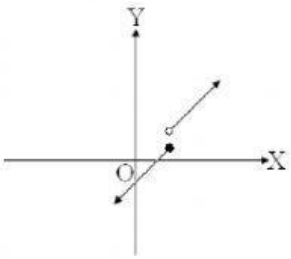

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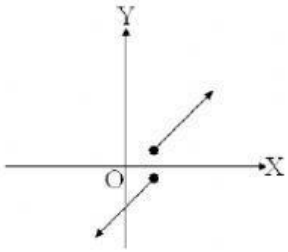

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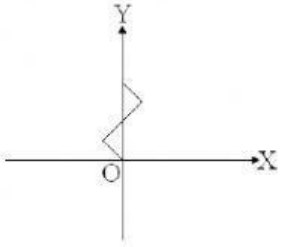

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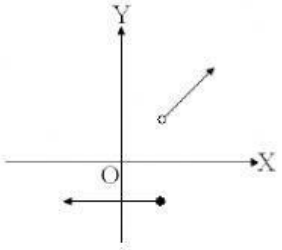

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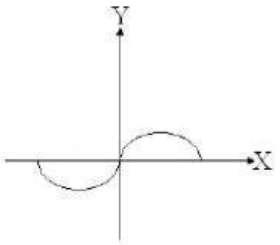

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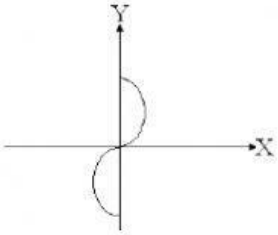

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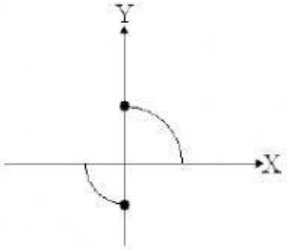

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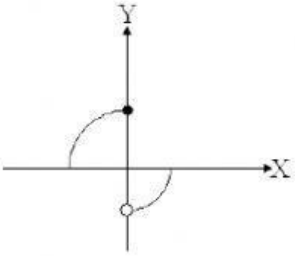

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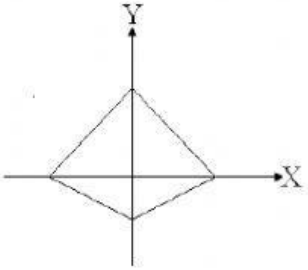

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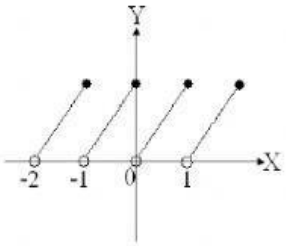

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