SCHOLAR

Date
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Exercise 4.2

1) Infinitely many solution

2) i) $2x + y = 7$

Let $x = 0$

Then,

$2x + y = 7$

$2 \times 0 + y = 7$

$y = 7$

Let $x = 1$

Then,

$2 \times 1 + y = 7$

$2 + y = 7$

$y = 5$

Let $x = 2$

Then,

$2 \times 2 + y = 7$

$4 + y = 7$

$y = 7 - 4$

$= 3$

Let $x = 3$

Then,

$2 \times 3 + y = 7$

$6 + y = 7$

$y = 1$

ii) $\pi x + y = 9$

= Let $x = 0$

Then,

$\pi x + y = 9$

$\pi \times 0 + y = 9$

$y = 9$

Let $x = 1$

Then,

$\pi \times 1 + y = 9$

~~Let x~~ $\pi + y = 9$

$y = 9 - \pi$

Let $x = -1$

Then,

$-\pi + y = 9$

$y = 9 + \pi$

(iii) $x = 4y$

Let $x = 0$

Then,

$0 = 4y$

$4y = 0$

$y = \frac{0}{4} = 0$

Let $x = 1$

Then,

$x = 4y$

$1 = 4y$

$4y = 1$

$y = \frac{1}{4}$

Let $y = 4$

Then,

$x = 4y$

$x = 4 \times 4$

$x = 16$

Let $y = 1$

Then,

$x = 4y$

$x = 4 \times 1$

$x = 4$

3) i) 0, 2

Taking the values of x and $y = 0, 2$

$x - 2y = 4$

$= 0 - (2 \times 2) = 4$

$\therefore$ But, $-4 = 4$

So, It is not a solution of equation $x - 2y = 4$

ii) (2, 0)

$x - 2y = 4$

$2 - (2 \times 0) = 4$

$\Rightarrow 2 - 0 = 4$

$2 \neq 4$

(2, 0) is not a solution of the equation $x - 2y = 4$

iii) (4, 0)

$= x - 2y = 4$

$= 4 - 2 \times 0 = 4$

$= 4 - 0 = 4$

$= 4 = 4$

(4, 0) is a solution of the equation $x - 2y = 4$

iv) $(\sqrt{2}, 4\sqrt{2})$

$x - 2y = 4$

$= \sqrt{2} - (2 \times 4\sqrt{2}) = 4$

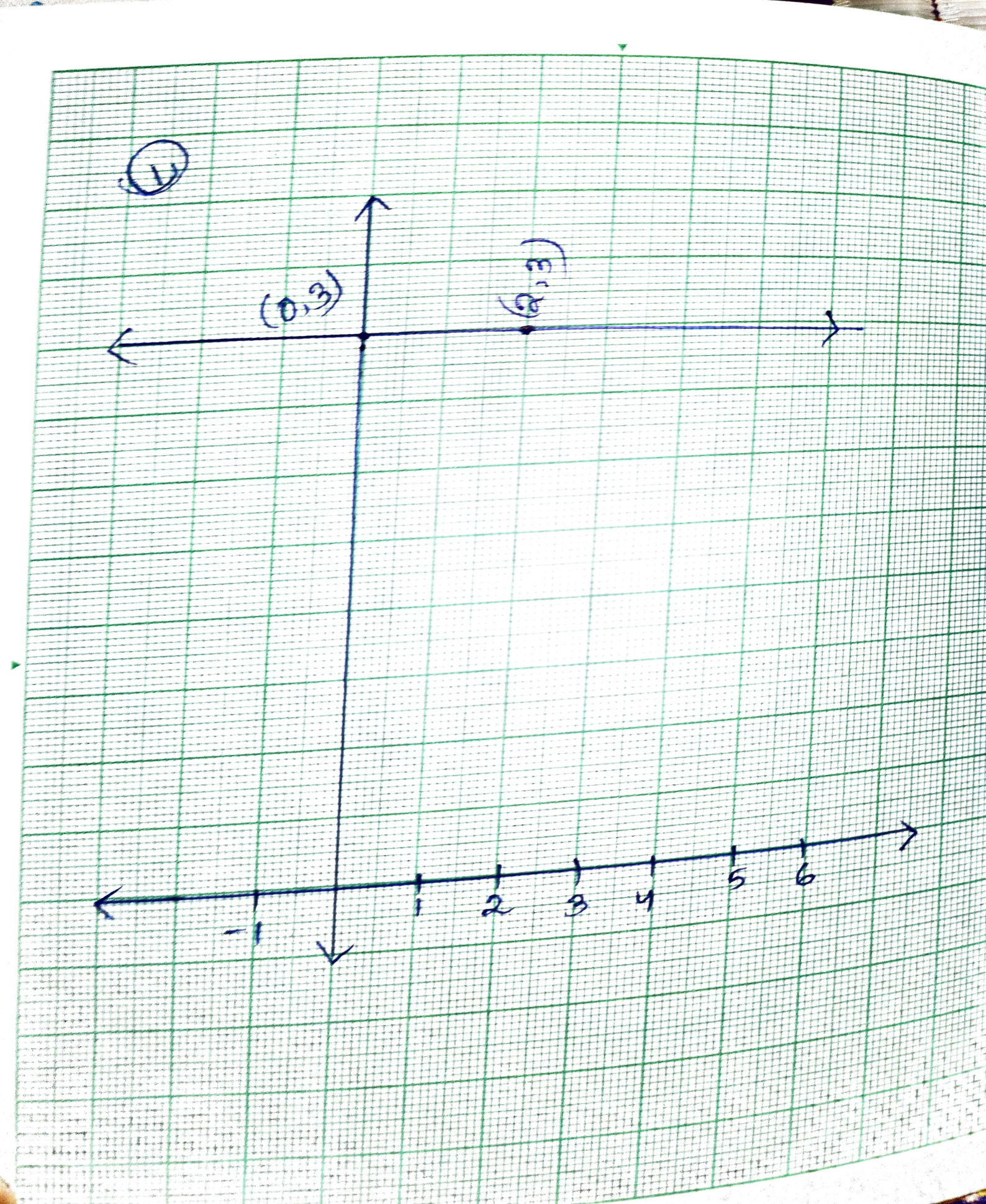
$= \sqrt{2} - 8\sqrt{2} \neq 4$

$=$

$\sqrt{2}, 4\sqrt{2}$ is not a equation of $x - 2y = 4$

4) The given equation is
$2x + 3y = k$
According to the question, $x = 2$ and $y = 1$.

we get
$2(x2) + (3 \times 1) = k$
$= 4 + 3 = k$
$= 7 = k$


(1)
(0,3)
(a,3)
-1
1
2
3
4
5
6
7

(2)