Homework

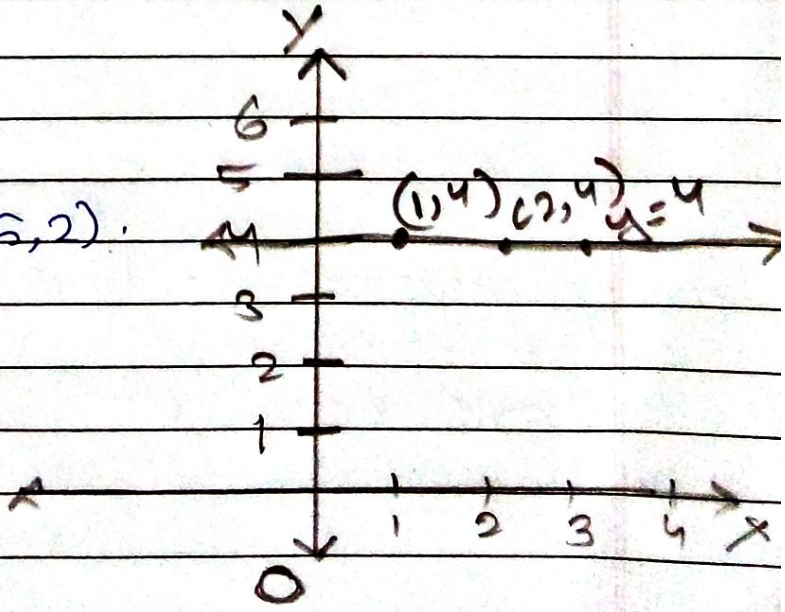
(1) Given equation,
$2x+3y=k$
Now, putting $x=2$ & $y=1$ in equation,
$\Rightarrow 2(2)+3(1)=k$
$\Rightarrow 4+3=k$
$\Rightarrow \boxed{k=7}$.

(2) $3x+4y=12$
the point on y-axis
Let $x=0$, so $3(0)+4y=12$, $4y=12$, $y=3$
point is $(0,3)$.
the point on x-axis.
Let $y=0$, so, $3x+4(0)=12$, $3x=12$, $x=4$,
point is $(4,0)$

(3) $(2,3)$ in 1st quadrant.

(4) A/Q,
$x=\frac{5}{2}y$
$2x+3y=20$
$2\left(\frac{5}{2}\right)y+3y=20$
$10y=20$
$y=2$
$x=5$.
Therfore, point is $(5,2)$.

(5)



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