Moving Straight Ahead   Teaching Aid 3.4B: Situation A

$3x - 7 = y$

x	y
-3	-16
-2	-13
-1	-10
0	-7
1	-4
2	-1
3	2
4	5

$3x - 7 = y$, find y when $x = -\frac{2}{3}$ Using integers, we can only estimate the solution
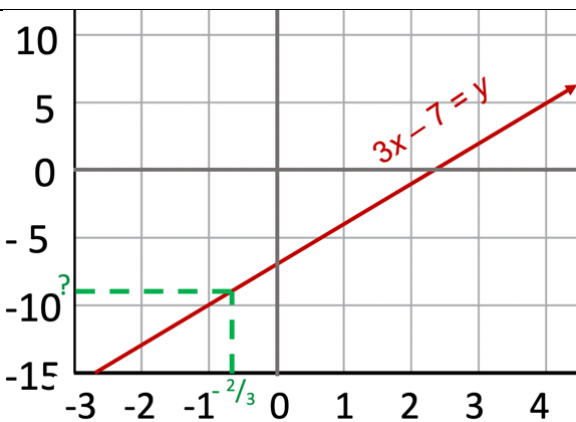
x	y
-3	-16
-2	-13
-1	-10
0	-7
1	-4
2	-1
3	2
4	5

$3x - 7 = y$, find x when $y = -5$ Using integers, we can only estimate the solution

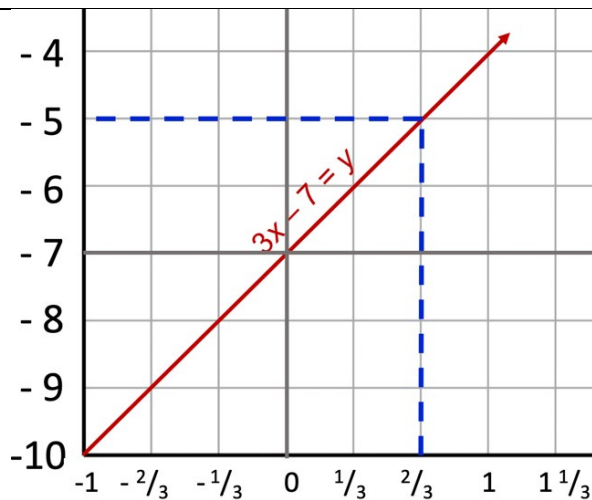| x	y
-3	-16
-2	-13
-1	-10
0	-7
1	-4
2	-1
3	2
4	5

If we use graphing technology, we can zoom in to find rational values for the solutions.

$3x - 7 = y$, find y when $x = -\,^2/_3$
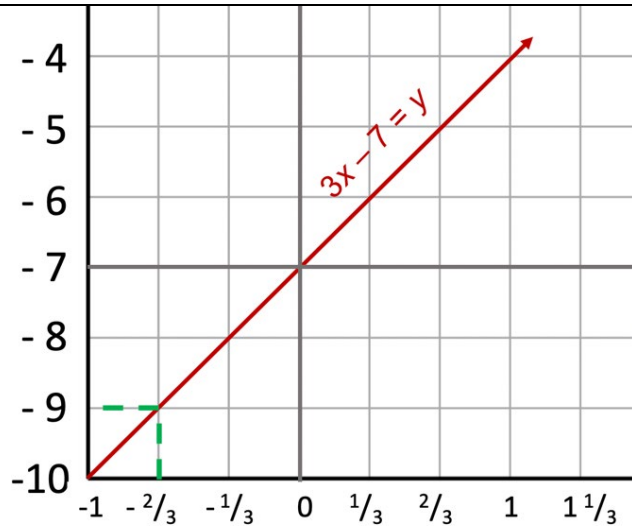
x	y
-1	-10
-2/3	-9
-1/3	-8
0	-7
1/3	-6
2/3	-5
1	-4
1 1/3	-3

$3x - 7 = y$, find x when $y = -5$

x	y
-1	-10
-2/3	-9
-1/3	-8
0	-7
1/3	-6
2/3	-5
1	-4
1 1/3	-3

These can be checked:

$3(-\,^2/_3) - 7 = y$ $\qquad\qquad\qquad$ $3x - 7 = -5$

$-\,^6/_3 - 7 = y$ $\qquad\qquad\qquad\quad$ $3x - 7 + 7 = -5 + 7$

$-2 - 7 = -9$ $\qquad\qquad\qquad\qquad\quad$ $3x = 2$

$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad$ $x = 2/3$