# DAY 1 2 - Graphing Lines using Intercepts

This method is convenient when y is not isolated. Find the intercepts, record them as coordinate points. Plot them. Ensure to extend the line all the way to grid edges. Use a ruler when you can.

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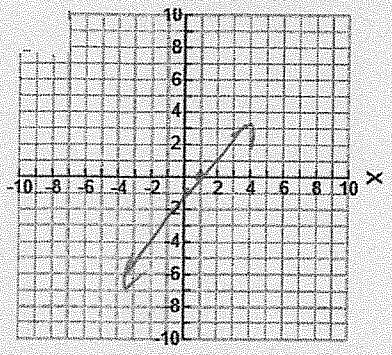
1. 

$x-1=y$

x-int: $y=0$

$x-1=0$

$x=1$

$(1,0)$

y-int: $x=0$

$0-1=y$

$-1=y$

$(0,-1)$

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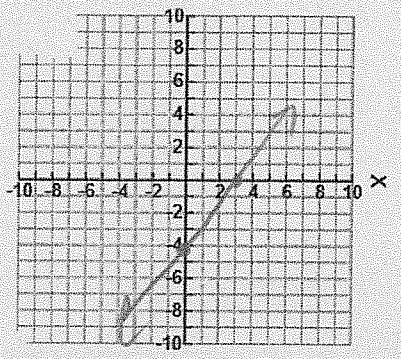
2. 

$4x-3y=12$

x-int

$4x-3(0)=12$

$4x=12$

$x=3$

$(3,0)$

y-int

$4(0)-3y=12$

$-3y=12$

$y=-4$

$(0,-4)$

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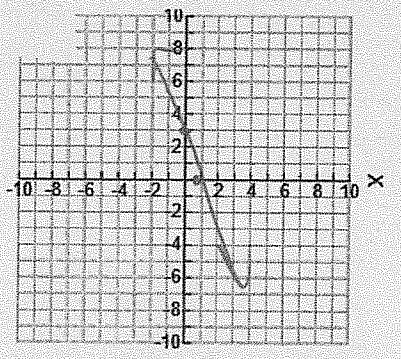
3. 

$7x+2y=6$

x-int

$7x+2(0)=6$

$7x=6$

$x\doteq 0.9$

$(0.9,0)$

y-int

$7(0)+2y=6$

$2y=6$

$y=3$

$(0,3)$

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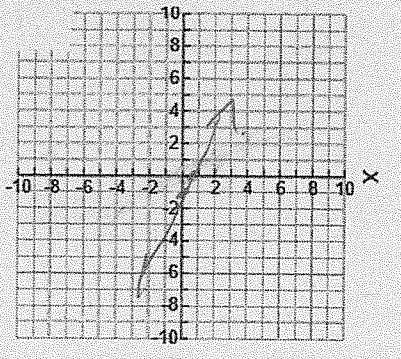
4. 

$2x-1=y$

x-int

$2x-1=0$

$2x=1$

$x=0.5$

$(0.5,0)$

y-int

$2(0)-1=y$

$-1=y$

$(0,-1)$

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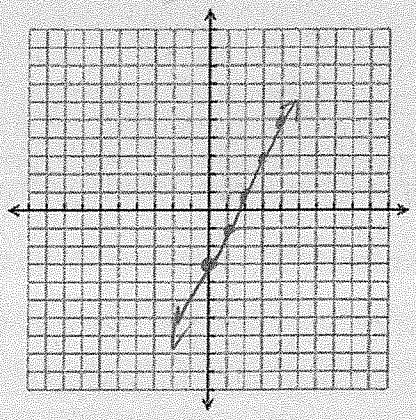
# Graph Lines using Table of Values

1. Graph the following

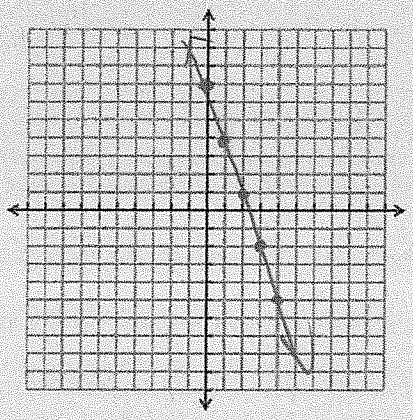
**a)**

| x | y |
|---|---|
| 0 | −3 |
| 1 | −1 |
| 2 | 1 |
| 3 | 3 |
| 4 | 5 |



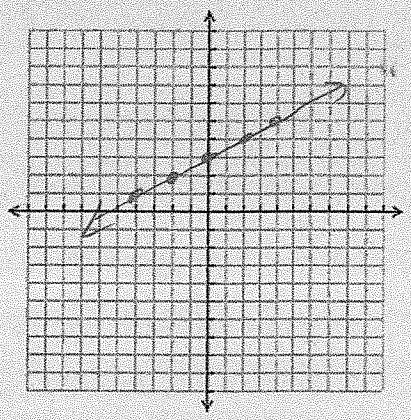
**b)**

| x | y |
|---|---|
| 0 | 7 |
| 1 | 4 |
| 2 | 1 |
| 3 | −2 |
| 4 | −5 |



**c)**

| x | y |
|---|---|
| −4 | 1 |
| −2 | 2 |
| 0 | 3 |
| 2 | 4 |
| 4 | 5 |



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2. Graph the relation of each equation using table of values for x = -2, -1, 0, 1, 2

**a)** $y = 2x + 5$

**b)** $y = x + 3$

**c)** $y = 4x - 2$

a)

| X | Y |
|---|---|
| −2 | 2(-2)+5 = -4+5 = 1 |
| −1 | 2(-1)+5 = -2+5 = 3 |
| 0 | 2(0)+5 = 0+5 = 5 |
| 1 | 2(1)+5 = 2+5 = 7 |
| 2 | 2(2)+5 = 4+5 = 9 |

b)

| X | Y |
|---|---|
| −2 | −2+3 = 1 |
| −1 | −1+3 = 2 |
| 0 | 0+3 = 3 |
| 1 | 1+3 = 4 |
| 2 | 2+3 = 5 |

c)

| X | Y |
|---|---|
| −2 | 4(-2)-2 = -8-2 = -10 |
| −1 | 4(-1)-2 = -4-2 = -6 |
| 0 | 4(0)-2 = 0-2 = -2 |
| 1 | 4(1)-2 = 4-2 = 2 |
| 2 | 4(2)-2 = 8-2 = 6 |

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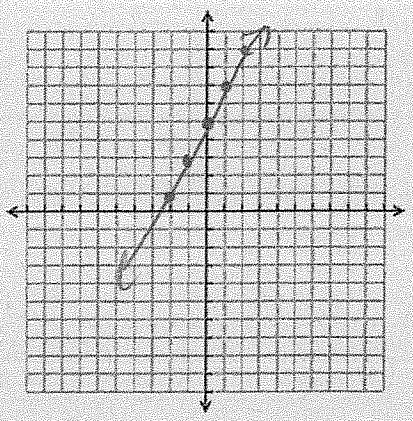

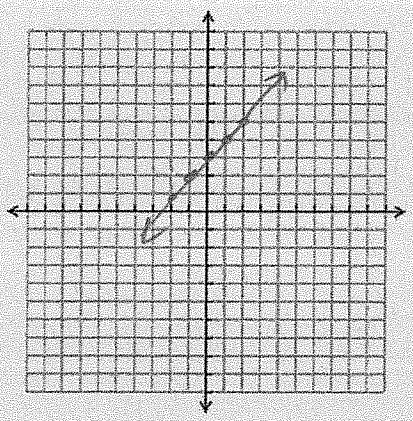

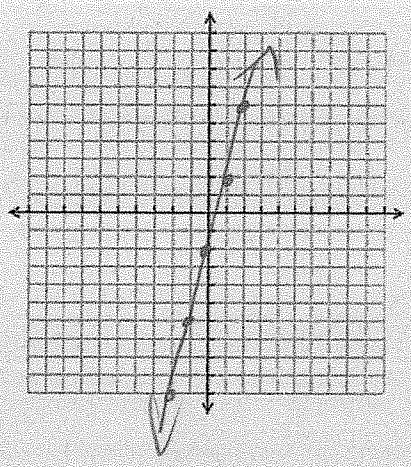



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