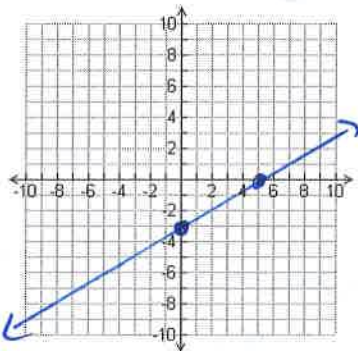
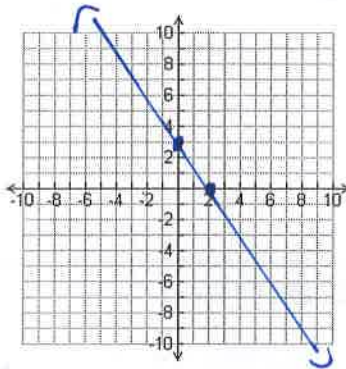


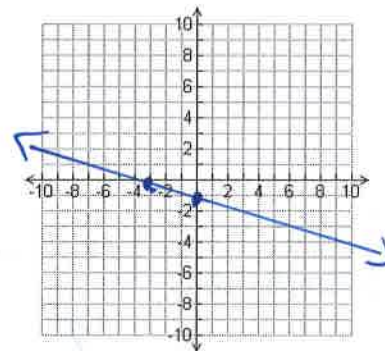
1. Graph the equation of a line with x-int 5 and y-int -3:



Graph the equation of a line with x-int 2 and y-int 3:



Graph the equation of a line with x-int -3 and y-int -1:



2. What are the x and y-intercepts of the following line? $3x+2y+6=0$

$$3x + 0 + 6 = 0$$

$$3x = -6$$

$$x = -2$$

$$0 + 2y + 6 = 0$$

$$2y = -6$$

$$y = -3$$

What are the x and y-intercepts of the following line? $2x-4y-12=0$

$$2x + 0 - 12 = 0$$

$$x = 6$$

$$0 - 4y - 12 = 0$$

$$y = -3$$

What are the x and y-intercepts of the following line? $5x+2y+30=0$

$$5x + 0y + 30 = 0$$

$$x = -6$$

$$0 + 2y + 30 = 0$$

$$y = -15$$

3. Find the slope of the line that passes through (-2,3) and (5,-2)

$$\frac{3 - (-2)}{-2 - 5} = \frac{5}{-7}$$

Find the slope of the line that passes through (-1,4) and (2,-3)

$$\frac{4 - (-3)}{-1 - 2} = \frac{7}{-3}$$

Find the slope of the line that passes through (-2,-3) and (-5,-2)

$$\frac{-3 - (-2)}{-2 - (-5)} = \frac{-1}{3}$$

4. Find the equation of a line with slope $\frac{1}{3}$ and y-int 5 in slope intercept form:

$$y = \frac{1}{3}x + 5$$

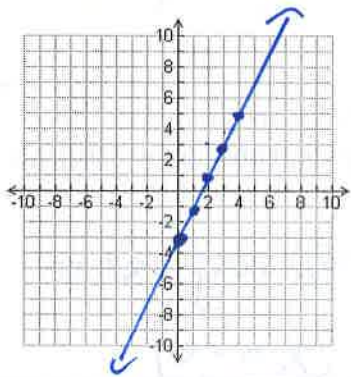
Find the equation of a line with slope $-\frac{2}{3}$ and y-int 4 in slope intercept form:

$$y = -\frac{2}{3}x + 4$$

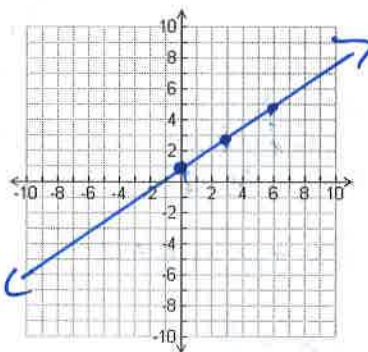
Find the equation of a line with slope 5 and y-int $\frac{2}{3}$ in slope intercept form:

$$y = 5x + \frac{2}{3}$$

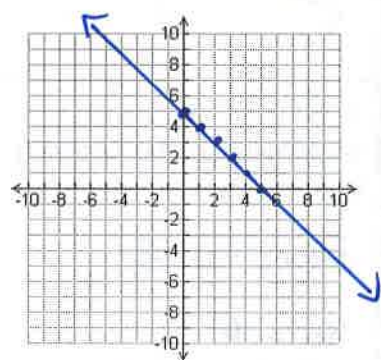
5. Graph $y=2x-3$



Graph $y=\frac{2}{3}x+1$



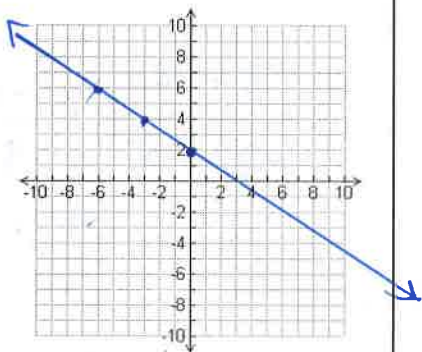
Graph $y=-x+5$



6. Graph $2x+3y-6=0$

$$3y = -2x + 6$$

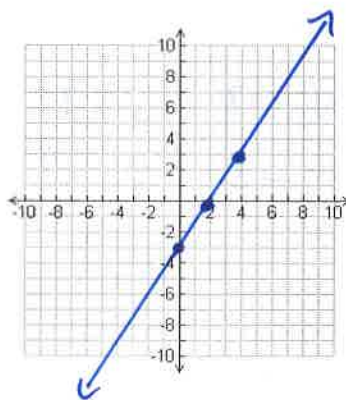
$$y = -\frac{2}{3}x + 2$$



Graph $3x-2y-6=0$ ^{+2y}

$$2y = 3x - 6$$

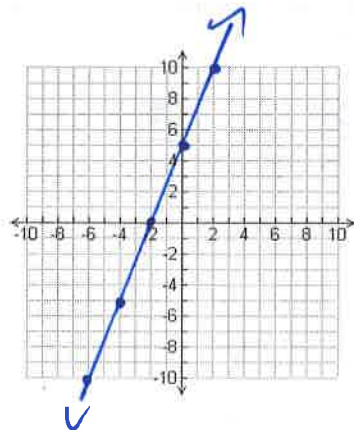
$$y = \frac{3}{2}x - 3$$



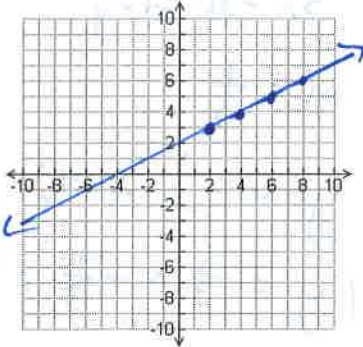
Graph $5x-2y+10=0$ ^{+2y}

$$2y = \frac{5x + 10}{2}$$

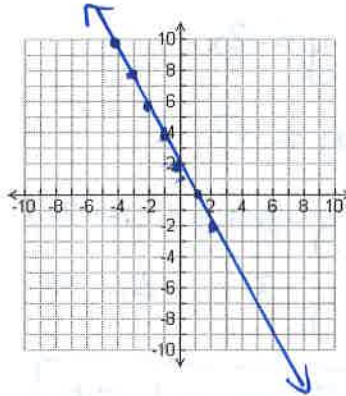
$$y = \frac{5}{2}x + 5$$



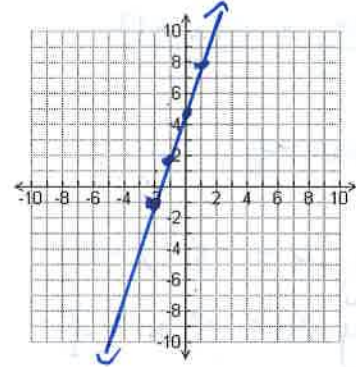
7. Graph $y-3=\frac{1}{2}(x-2)$



Graph $y-4=-2(x+1)$



Graph $y+1=3(x+2)$



8. Write the equation of the line that goes through $(-3, 2)$ and $(-2, 5)$ in all three forms

$$m = \frac{2-5}{-3--2} = \frac{-3}{-1} = 3$$

$$y-2 = 3(x+3)$$

$$y-2 = 3x+9$$

$$y = 3x+11$$

$$0 = 3x - y + 11$$

Write the equation of the line that goes through $(5, -2)$ and $(-2, -5)$ in all three forms

$$\frac{-2--5}{5--2} = \frac{3}{7}$$

$$y+2 = \frac{3}{7}(x-5)$$

$$y+2 = \frac{3}{7}x - \frac{15}{7}$$

$$7y+14 = 3x-15$$

$$0 = 3x - 7y - 29$$

$$y+2 = \frac{3}{7}x - \frac{15}{7}$$

$$y = \frac{3}{7}x - \frac{29}{7}$$

Write the equation of the line that goes through $(3, 2)$ and $(-5, 5)$ in all three forms

$$\frac{2-5}{3--5} = \frac{-3}{8}$$

$$y-2 = -\frac{3}{8}(x-3)$$

$$y-2 = -\frac{3}{8}x + \frac{9}{8}$$

$$8y-16 = -3x+9$$

$$3x+8y-25=0$$

$$y = -\frac{3}{8}x + \frac{25}{8}$$

9. Write the equation of the line that is parallel to $4x+8y-12=0$ and goes through $(3,4)$ in general form

$$8y = \frac{-4x+12}{8}$$

$$m = -\frac{1}{2}$$

$$y-4 = -\frac{1}{2}(x-3)$$

$$y-4 = -\frac{1}{2}x + \frac{3}{2}$$

$$2y-8 = -1x+3$$

$$\boxed{1x+2y-11=0}$$

Write the equation of the line that is parallel to $2x+y-1=0$ and goes through $(-2,3)$ in general form

$$y = -2x+1$$

$$m = -2$$

$$y-3 = -2(x+2)$$

$$y-3 = -2x-4$$

$$\boxed{2x+y+1=0}$$

Write the equation of the line that is parallel to $5x-15y-30=0$ and goes through $(-1,0)$ in general form

$$5x-30=15y$$

$$m = \frac{1}{3}$$

$$y-0 = \frac{1}{3}(x+1)$$

$$(y = \frac{1}{3}x + \frac{1}{3})^3$$

$$3y = 1x+1$$

$$\boxed{0 = x-3y+1}$$

10. Write the equation of the vertical line that goes through $(3,4)$

$$x=3$$

or

$$x+0y-3=0$$

Write the equation of the horizontal line that goes through $(5,-6)$

$$y=-6$$

or

$$0x+y+6=0$$

Write the equation of the vertical line that goes through $(0,5)$

$$x=0$$

or

$$x+0y=0$$