## Graph the following linear equations using slope-intercept form.

1. $y=2 x+1$

2. $y=3 x-4$

3. $y=-3 x-2$

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

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


## Write the slope-intercept form of the equation of each line.

1) $3 x-2 y=-16$
2) $13 x-11 y=-12$
3) $9 x-7 y=-7$
4) $x-3 y=6$
5. $\mathrm{y}-1=\frac{2}{5}(\mathrm{x}+10)$
6. $y+4=-14\left(x-\frac{3}{7}\right)$

Give an equation in point-slope form that satisfies the given information.

1. Passes through $(2,3)$ and has slope of $-\frac{1}{2}$.
2. Passes through $(-1,4)$ and $m=4$.
3. Passes through $(0,2)$ and has slope of $-5 / 3$.
4. Passes through $(4,-2)$ and $m=0$.

Give the slope of each of the following lines. Name a point on each line.
7. $y+2=2 / 3(x-4)$
8. $y-3=\frac{1}{2}(x-3)$
9. $y+5=\frac{1}{4}(x+2)$
10. $y=2(x+3)$

Graph each of the following lines by first giving the point and the slope.
13. $y+2=1 / 3(x+1)$
14. $y+1=-\frac{1}{2}(x-3)$

Point $\qquad$ Slope $\qquad$ Point ___Slope $\qquad$


15. $y-3=-2(x-4)$

Point $\qquad$ Slope $\qquad$
16. $y-5=3 x$

Point $\qquad$ Slope $\qquad$



Find the x - and y -intercepts of each equation and then graph the line.

1) $x+2 y=8$

2) $3 x-y=9$
$x$-int $=$ $\qquad$ $y-$ int $=$ $\qquad$

$x$-int $=$ $\qquad$ $y$-int $=$ $\qquad$
3) $-3 x+y=6$

x -int $=\ldots \mathrm{y}$-int $=$
$\qquad$
$\qquad$
4) $5 x-3 y=15$

$x-$ int $=\ldots y$-int $=$ $\qquad$

Write each equation in standard form using integers.
7) $y=3 x+1$
8) $y=4 x-7$
9) $y=\frac{1}{2} x-3$
10) $y=\frac{2}{3} x+5$
11) $y=-\frac{3}{4} x-4$
12) $y=-\frac{4}{5} x-7$

