$\qquad$ Period $\qquad$
Find the intercepts of each line.

1. $5 x+6 y=30$
2. $2 x-3 y=24$

Write in slope-intercept form
3. $3 y=15-6 x$
4. $2 x-5 y=-6$

Is the line Vertical or Horizontal?
5. $\mathrm{X}=21$
6. $Y=-2$
7. Determine whether the data set represents a linear function. If the data is linear, state the slope of the line containing the points.
A.
B.

| $x$ | -2 | 1 | 4 | 7 |
| :---: | :--- | :--- | :--- | :--- |
| $f(x)$ | -10 | -6 | 4 | 13 |


| x | -2 | -1 | 0 | 1 |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{f}(\mathrm{x})$ | 10 | 7 | 4 | 1 |

8. Graph the line with slope $-\frac{1}{3}$ and passing through the point $(-3,2)$.


Then write the equation of the line in slope-intercept form.

Slope-intercept form $\qquad$
9. Find the x -intercept and the y -intercept of the line and graph the line.

$$
2 x-3 y=6
$$

x-intercept $\qquad$ y-intercept $\qquad$


Then write $2 x-3 y=6$ in slope-intercept form.
Slope-intercept form $\qquad$
9. Find the slope of the line through $(-4,12)$ and $(-3,8)$.

Problems 13-18, write the equation of:
13. Write an equation of a line with slope 5 and $x$-intercept $\frac{4}{5}$ in slope-intercept form.
14. Write an equation of a line with slope $-\frac{3}{5}$ and passing through $(-5,1) \underline{\text { in point- }}$ slope form.
15. Write an equation of a line in slope-intercept form.

| $X$ | -2 | 0 | 5 | 6 |
| :---: | :--- | :--- | :--- | :--- |
| $\mathrm{f}(\mathrm{x})$ | 14 | 15 | 17.5 | 18 |

16. Write an equation of a line in slope-intercept form.

17. a line parallel to $\mathrm{y}=3 \mathrm{x}+5$ and through $(-6,7)$ in point-slope form.
18. Write an equation of a line perpendicular to $y=-\frac{5}{6} x-2$ and through $(-12,10)$ in point-slope form.
19. Graph $3 x-4 y \leq 8$

20. Graph $\mathrm{y}=2 \mathrm{x}+1$

21. Graph a perpendicular line to $\mathrm{y}=-3 / 4 \mathrm{x}+2$ and through $(6,-4)$

