1. Find the coordinates of the point $S$.

2. Find the coordinates of the point $U$.

3. In what quadrant does the point $(-1,3)$ lie?
4. Graph on an $x y$-coordinate system: $2 x-3 y=8$
5. Graph on an $x y$-coordinate system: $\frac{2}{5} x+\frac{3}{5} y=1$
6. Graph on an $x y$-coordinate system: $y=-6$
7. Graph on an $x y$-coordinate system: $x=0$
8. Graph the vertical line through the point $(3.5,1.7)$ and find the equation of this vertical line.
9. Graph the line $y=\frac{3}{2} x-3$ using a table of values.
10. Graph the line $\mathrm{y}=\frac{3}{2} \mathrm{x}-3$ using the slope and y -intercept.
11. Find the $x$-intercept and $y$-intercept of the line $x-y=5$.
12. Find the $x$-intercept and $y$-intercept of the line $7 x+2 y=-12$.
13. What is the slope of any horizontal line?
14. What is the slope of any vertical line?
15. Find the slope and $y$-intercept of the line $5 x+3 y=-6$.
16. Find the slope of the line that contains the points $(1,3)$ and $(-8,-3)$.
17. Find the slope of the line that contains the points $(-5,-8)$ and $(-7,2)$.
18. Find the equation of the line which passes through the point ( $-1,-3$ ) and has a slope of -4 . Write your final equation in slope-intercept form.
19. Find the equation of the line which passes through the point $(-4,6)$ and has a slope of $\frac{2}{3}$. Write your final equation in slope-intercept form or another form. Graph the line.
20. Find the equations of the horizontal line and vertical line that pass through the point $(-3,1)$.
21. Find the equation of the line which passes through the points $(1,-5)$ and $(-1,3)$. Write your final equation in slope-intercept form or another form.
22. Find the equation of the line which passes through the points $(4,2)$ and $(-2,-7)$. Write your final equation in slope-intercept form or another form.
23. Find the equation of the line which passes through the point $(1,5)$ that is parallel to the line $y=2 x-4$.
24. Find the equation of the line which passes through the point $(-2,7)$ that is perpendicular to the line $y=2 x+1$

## ANSWERS:

1. $(-4,0)$
2. $(4,-5)$
3. Quadrant II
4. 


5.

6.

7.


## ANSWERS (CONTINUED):

8. Equation of Vertical Line: $x=3.5$

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


Table Of Values (Answers May Vary):

| $x$ | $y$ |
| ---: | ---: |
| -2 | -6 |
| 0 | -3 |
| 2 | 0 |

10. 


slope: $\frac{3}{2}$
y-intercept: $(0,-3)$
11. $\quad$-intercept: $(5,0)$, $y$-intercept: $(0,-5)$
12. $x$-intercept: $\left(-\frac{12}{7}, 0\right)$, $y$-intercept: $(0,-6)$
13. slope: 0
14. slope: undefined
15. slope: $m=-\frac{5}{3}$ $y$-intercept: $(0,-2)$
16. $\frac{2}{3}$
17. -5
18. $y=-4 x-7$
19. $y=\frac{2}{3} x+\frac{26}{3}$ or $(y-6)=\frac{2}{3}(x+4)$ (either form is fine)
20. Horizontal Line: $y=1$

Vertical Line: $x=-3$
21. $y=-4 x-1$ or $(y+5)=-4(x-1)$ or $(y-3)=-4(x+1)$ (any of these is fine)
22. $y=\frac{3}{2} x-4$ or $(y-2)=\frac{3}{2}(x-4)$ or $(y+7)=\frac{3}{2}(x+2)$ (any of these is fine)
23. $(y-5)=2(x-1)$ or $y=2 x+3$ (either form is fine)
24. $(y-7)=-\frac{1}{2}(x+2)$ or $y=-\frac{1}{2} x+6$ (either form is fine)

