

Linear Functions and Relations

Review

- Graph each of the following functions using its slope and y intercept
 - $y = 3x - 1$
 - $y = -5x + 6$
- Write an equation in slope-intercept form for the line that passes through the following ordered pairs
 - $(12, 9)$, $(7, 11)$
 - $(4, -2)$, $(12, 4)$
- Write an equation in point-slope form for the line that passes through each of the following points with the given slope
 - point: $(3, 9)$, slope: 6
 - point: $(-2, 5)$, slope: -4
- Determine whether each of the following functions are parallel, perpendicular, or neither.
 - $3x - 2y = 14$; $-9x + 6y = 3$
 - $8x + 14y = 3$; $-5x - 16y = 11$
- Graph a scatter plot for the following table. Determine there is a positive correlation, negative correlation, or no correlation

x	y
2	14
4	12
5	8
6	2
8	3
10	-2

6. Graph each of the following functions:

a) $f(x) = \begin{cases} -3x + 2 & \text{if } x > 2 \\ x - 5 & \text{if } x \leq 2 \end{cases}$

b) $f(x) = |4x + 2|$