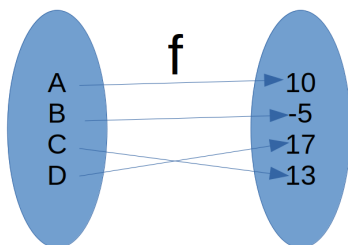


Test 1 Spring

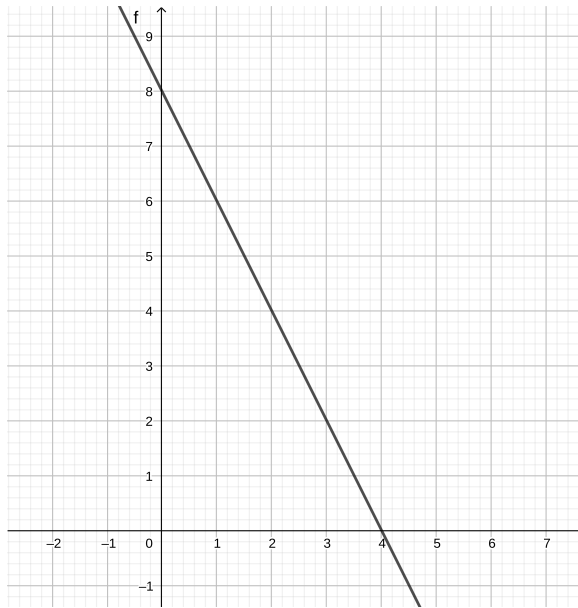
Please read and follow all instructions.

1. Sketch the graph of $y = -2x + 6$ including the x and y intercepts.
2. Solve for x : $3x + 2 = 23$
3. Solve for x : $5x + 1 = 2x - 17$
4. Find the equation of the line with slope 3 through $(2, 5)$ **in slope-intercept form**.
5. Given two points $(1, 3)$ and $(4, 12)$:
 - (a) Find the slope of the line connecting them.
 - (b) Sketch the line.
 - (c) What is the y-intercept?
6. Given $f(x) = x^2 + 3x + 1$, find:
 - (a) $f(2) = ?$
 - (b) $3 \xrightarrow{f} ?$
 - (c) $f(-1) = ?$
7. For the function f given below answer the following questions:



- (a) $f(A) = ?$
- (b) $C \xrightarrow{f} ?$
- (c) $f(13) = ?$
- (d) $f(D) = ?$

8. Find the slope and intercept of the line $4x + 2y = 16$.
9. Find the slope of a line perpendicular to the line $y = 2x - 8$.
10. For the graph shown below find:
- (a) The slope
 - (b) The x intercept
 - (c) the y intercept



11. (Extra Credit) Draw a Hitomezashi stitch pattern.