Name

1) Solve for y: $A = \frac{x + y}{2} \cdot h$ Draw a graph of the case when A = 24, h = 3.



2) Find the **slope** and **y-intercept** then give the equation for each line shown. B is horizontal.

Line	Slope	y-intercept	Equation	
А				y ▲ B
В				A X
С				c

3) Find the equation for the following three lines.

- (a) Line A passes through: (-2, 3) & (2, 5)
- (b) Line B passes through: (1,7) & (5,-1)
- (c) Line C passes through: (-5,4) & (7,0)





5) Give the *slope* and *y*-*intercept* of each line.

(a)
$$y = \frac{-3x}{5} + 6$$
 (b) $y = \frac{5x - 12}{2}$ (c) $y = 4 - x$ (d) $3y - 4x = 24$

6) Convert to Slope-Intercept form: (a) 4x + 3y = 12 (b) 7x - 5y = 25

7) Convert to Standard-Integer form: (a) $y = (\frac{3}{4})x + 8$ (b) $y = (\frac{-5}{8})x - 12$

- 8) Find both intercepts: (a) 4x + 3y = 24 (b) $y = (\frac{5}{8})x 20$
- 9) Give the equations for the vertical and horizontal lines that cross at (5, 7).
- 10) Show that x + y = 0 and x y = 0 intersect perpendicularly at the origin.

11) Determine the x-scale and y-scale then graph each equation in its proscribed region.



Determine equations for the following cases. Write your answers in *Slope-Intercept* form. 12) A line passing through (2.4, 1.9) & (-5.6, 9.5).

13) A line passing through (236, 519) & (-504, 911).

14) A line crossing the x-axis at -12 and the y-axis at -6.

15) A line passing through (-10, 12) and parallel to 8x - 12y = 15.

16) A line passing through (-6, 2) and perpendicular to $y = (\frac{2}{3})x + 6$.

Find the equation representing these lines in *Slope Intercept* form.

17)		18)		19)	
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Bonus

Give the equations of the lines that would make your initials in BLDCK letters. Enter them into your calculator, graph and show me the result.