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

2) Find the slope and $\mathbf{y}$-intercept then give the equation for each line shown. B is horizontal.

| Line | Slope | y-intercept | Equation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A |  |  |  |

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: $(-5,4) \&(7,0)$
4) Simplify to slope intercept form and graph. $\frac{7}{4}+\frac{3 \mathrm{x}}{5}=\frac{2 \mathrm{x}+5 \mathrm{y}}{20}+2$

5) Give the slope and $y$-intercept of each line.
(a) $y=\frac{-3 x}{5}+6$
(b) $\mathrm{y}=\frac{5 \mathrm{x}-12}{2}$
(c) $y=4-x$
(d) $3 y-4 x=24$
6) Convert to Slope-Intercept form:
(a) $4 x+3 y=12$
(b) $7 x-5 y=25$
7) Convert to Standard-Integer form: (a) $y=(3 / 4) x+8$
(b) $\mathrm{y}=(-5 / 8) \mathrm{x}-12$
8) Find both intercepts:
(a) $4 x+3 y=24$
(b) $y=(5 / 8) x-20$
9) Give the equations for the vertical and horizontal lines that cross at $(5,7)$.
10) Show that $\mathrm{x}+\mathrm{y}=0$ and $\mathrm{x}-\mathrm{y}=0$ 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 $8 x-12 y=15$.
16) A line passing through $(-6,2)$ and perpendicular to $y=(2 / 3) x+6$.

Find the equation representing these lines in Slope Intercept form.
17)

## Bonus

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

