

FUNctions

7th Pre-Algebra
Chapter 8 – Functions Foldable

Your Name:

NAGS

Extra Notes Here:

ing

Graph

Inequalities

Slope

NNumerical
Table

x	y

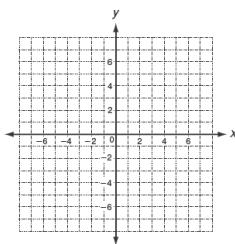
AAlgebraic
Equation

$$y = Mx + b$$

$$Ax + By = C$$

G

Graph

**S**

Sentence

Function Machine

$$y = f(x)$$

Domain

Range

Vertical Line Test

Write the ordered pairs for:

$$h(-2) = 5$$

$$g(7) = -3$$

$$f(x) = -2x + 1 \quad g(x) = 3x - 4$$

Find $f(x)$ when $x = -2$ Find x when $f(x) = -9$ Find $f(2) - g(1)$ *Pick Smart when Graphing!**Which FORM is your equation in?*

$$y = Mx + b$$

Graph using
the slope
and
y-intercept!

$$Ax + By = C$$

Graph using
the
x- and y-
intercepts!**Slope-Intercept Form**

$$y = Mx + b$$

1. Solve for y.
2. b is the y-intercept.
Graph (0,b)
3. Then rise/run the M.

Standard Form

$$Ax + By = C$$

1. Set $x = 0$, solve for y.
2. Set $y = 0$, solve for x.
3. Plot (x,0) and (0,y)

Numerical TABLE

1. Create an x- y- table.
2. Pick x's, plug in to find y.
3. Plot the points.

Slope = M

$$M = \frac{\text{rise}}{\text{run}}, \quad M = \frac{\Delta y}{\Delta x}, \quad M = \frac{y_2 - y_1}{x_2 - x_1}$$

*Rise rhymes with y's!***Parallel and Perpendicular Slopes****Parallel Slopes** – are the SAME!

$$\parallel \quad M = M$$

Perpendicular Slopes –
are the negative reciprocal

$$\perp \quad M = -\frac{1}{M}$$

Inequalities

To Graph an Inequality:

1. Graph the equation
2. Is the line dotted?
3. Shade it using a test point!

 \leq, \geq Less, Greater than AND equal to!

 $<, >$ Less or Greater than ONLY!
