Integrated Math 3
Unit 1: Analytic Geometry
1.1

Objective: to review graphing lines in standard, slope-intercept, and point-slope form.
Warm Up: Draw an example of a line with:
a) positive slope
b) negative slope
c) zero slope
d) undefined slope

## Review:

Example 1: Graph the following lines.
a) $y=-\frac{2}{3} x+5$
b) $y=2 x-4$
c) $y=5-x$

d) $y=-5$



e) $x=3$

$$
\text { f) } y=0
$$



Example 2: Graph each equation using intercepts.
a) $5 x-2 y=10$

b) $x+3 y=-3$


Example 3: Write each equation in slope-intercept form. Then, find the slope and y-intercept.
a) $x+y=1$
b) $2 x+4 y=-4$
c) $3 x=-4 y+24$

New Idea: Point-Slope Form

Example 4: Write the equation for the graphs below.
a)

b)


Example 5: Transform the given equation into slope intercept form: $y-4=3(x+5)$

