

# Math 10: Unit 6 (Chp 6) Linear Equations

## Unit 6.1: Different Forms of Linear Equations

-remember: a linear equations gives a straight line graph

A) What are the main ways to write a linear equation?

-4 ways: standard form:

general form:

slope-intercept form:

point-slope form:

B) Standard form

Ex:

C) Slope-intercept form:

Ex:

Ex:

Examples:

i)  $3x+2y=6$

ii)  $3x-2y=6$

iii) slope is 3, y-intercept = -5. Equation?

iv) slope is 3 and passes through (-4, 1). Equation?

Try: i) slope =  $\frac{3}{2}$ , y-intercept = 5. Equation?

ii) slope = -4. Line passes through (3, 1). Equation?

D) Point-slope form

-notice:

Ex: slope=2, line passes through (-4, 1). Equation?  
-point slope form:

-slope-intercept form:

-standard form:

Ex: slope =  $\frac{1}{2}$ , passes through (3, -5).

-point-slope form:

-slope-intercept form:

-standard form:

Ex: slope =  $\frac{-2}{3}$ , passes through (0, -2).

-point slope form:

-slope-intercept form:

-standard form:

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