

Name: \_\_\_\_\_

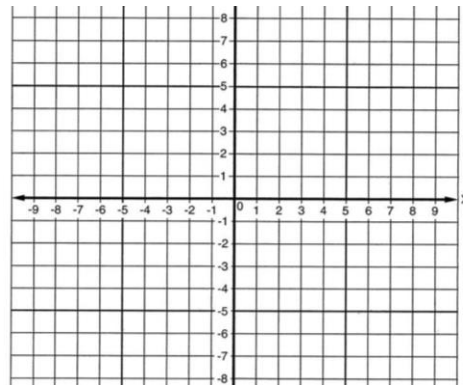
## HN CALC SUMMER ASSIGNMENT

### Chapter 0 HW

### 0.1 Graphing Lines and Linear Equations

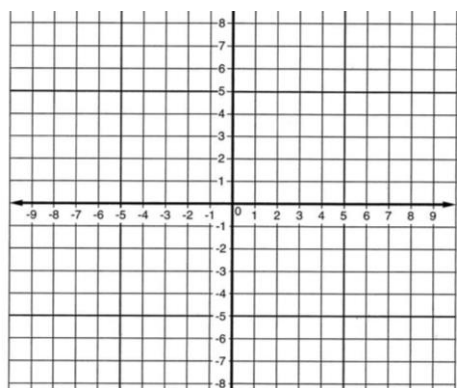
Ex1

55. Find the slope and y-intercept of the line:  $2x - 3y = 6$   
Then graph the line.

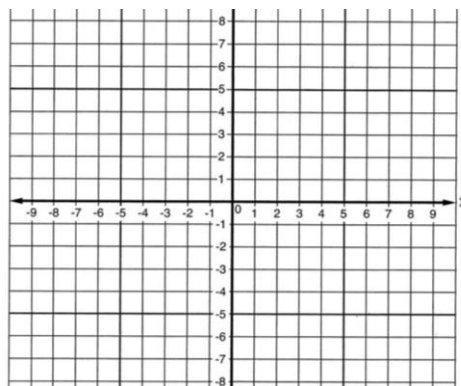


Ex2

33. Write the equation of the line with a slope of 2 that goes through the point  $(-4, 1)$ .  
Then graph the line.



37. Write the equation of the line with a slope of  $1/2$  that goes through the point  $(1, 3)$ .  
Then graph the line.



Ex3

13. Write the equation of a line containing (2, 3) and (1, 0).

29. Write the equation of a line containing (0, 0) and (-2, 1).

30. Write the equation of a line which contains (2, 9) and is parallel to  $y = 4x + 6$ .

Ex4

40. Write the equation of a line with a slope of zero, which contains the point (1, 4).  
Sketch the graph.

41. Write the equation of a line with undefined slope, which contains the point (1, 4).  
Sketch the graph.

**0.2 Exponents - Simplify:**

75.  $(8x^3)^2$

76.  $7(x^{-5}y^5)^{-8}$

77.  $\frac{(8x^5)^2}{x^{-1}x^{10}}$

83.  $\left(\frac{3x^{-1}}{4y^{-1}}\right)^{-2}$

**#17-18 Rewrite using radicals**

17.  $x^{1/4}$

18.  $x^{3/5}$

**#19-20 Rewrite using exponents**

19.  $\sqrt[4]{x}$

20.  $\sqrt[3]{x}$

**0.3 Polynomials - Factor:**

35.  $x^7 - x^5$

11.  $x^2 - 36$

15.  $x^2 + 7x + 10$

23.  $3x^2 - 12x - 36$

27.  $5x^2 - 18x + 9$

49.  $x^3 + 2x^2 - x - 2$

#### **0.4 Solving Equations**

**Solve the Linear Equation:**

13.  $8x - (2x + 1) = 3x - 10$

**Solve the Quadratic Equations:**

25.  $x^2 = 9x$

55.  $x^2 + 4x - 12 = 0$

**Solve the Absolute Value Equation:**

39.  $|1 - 4x| = 5$

**Solve the Radical Equation:**

40.  $\sqrt{x + 2} = 3$

#### **0.5 Solving Inequalities:**

53.  $4 - 3(1 - x) \leq 3$

55.  $\frac{1}{2}(x - 4) > x + 8$