

Name \_\_\_\_\_ Section/Period \_\_\_\_\_  
Assigned: \_\_\_\_\_

Find the equation of the line through these points in ALL THREE FORMS. You do NOT need to graph these.

1.  $(0, 0)$  and  $(1, 2)$

2.  $(4, 2)$  and  $(3, 5)$

3. (4, 1) and (5, 5)

4. (-3, 2) and (-2, -4)

5. (3, -2) and (1, -2)

For each of the following, use the given information to state the equation of the line. State the equation in all three forms. Then graph each with any method you choose.

6.  $m=3$  and through the point  $(2, -3)$

7. x-intercept at 4 and a slope of -2

8. Passes through the points  $(-2, -4)$  and  $(-3, -5)$

9. Has the same slope as  $y=2x+3$  and goes through the point  $(-4, 3)$

10. Has a slope of 0 and goes through the point  $(-2, 5)$

11. Has an undefined slope and passes through the point  $(4, 2)$

12. Use the following information to solve the problem. You must graph your final solution.

If two lines are parallel, it means they never touch. Parallel lines have the same slope. For example, the lines  $y=3x+5$  and  $y=3x-1$  are parallel because their slopes are the same (in this case, they both have a slope of 3). Using this knowledge about parallel lines, what is the equation of the line parallel to  $4x+3y=6$  and goes through the point  $(3, 3)$ ?