Name: _____ Bell: _____

Algebra 2 – Warrior Extended Learning Packet **Linear Functions**

Answer the following on a separate sheet of paper if needed

Find the slope of the line passing through the given points:

1. (3, 2) and (-4, 3)
2. (1, -4) and (2, 6)
3. (14, -3) and (4, 11)
4. (6, -6) and (-6, 6)
5. (-10, -12) and (2, -6)

Write the equation of the line with the given information:

6. $m = 3, b = -2$
7. $m = -2, b = 4$
8. $m = \frac{1}{2}, b = 5$
9. Runs through (3, -1) and (0, 2)
10. Runs through (-2, -2) and (-1, 4)

Find the equation of the line that passes through the given points:

11. (8, 5) and (11, 14)
12. (-5, 9) and (-4, 7)
13. (-8, 8) and (0, 1)
14. (2, 0) and (4, -6)
15. (-2, 0) and (0, 6)

Graph the following equations:

16. $y = 2x + 1$
17. $y = -\frac{2}{3}x - 4$
18. $y = 7$
19. $y = \frac{1}{2}x + 2$
20. $y = -4x - 2$