Name _____

Date _____

Period _____

Summer Review Packet for
all students entering

Honors Geometry

This packet contains many algebra skills that you have already learned. Your *mastery* of these skills is extremely important for your success this coming school year in Geometry. Therefore, this packet was created for you so that you will be better prepared (and to help you remember these skills over the summer!). As a student entering Honors Geometry, you should complete this entire packet to ensure your mastery of each topic and to give you extra practice over the summer break. Your teacher will review these skills for two days and test you on the third day of school. The honors curriculum moves quickly from the start!

You may use a calculator to assist you, but this cannot serve as a replacement for showing work. You will be expected to show your work on every assignment and assessment during the upcoming school year in Honors Geometry.

This assignment is due the first day of school at the beginning of class. As a class, we will review the topics covered in this packet and a test will be given on the third day. Enjoy your summer, but don't wait until the last minute to work on this packet. Do a dozen problems per week (or a whole bunch on a rainy day!) and you will get done with time to spare. You may work with your friends, but everyone needs to do their own work on their own packet. Remember, the purpose of this packet is to ensure that you have *mastered* these skills. A great way to see if you understand a topic is to try and explain it to someone else.

If you do need some extra instruction to help you review, there are many good videos online to help with these concepts. Khan Academy and patrickjmt.com are great sites to use as references; just search for the topics you are working on.

If you have any questions regarding the requirements of this assignment, please email Mrs. Israel at kisrael@barbertonschools.org. For assistance in completing individual problems, you may refer to your notes from Pre-Algebra or Algebra.

I look forward to having you in class this coming school year. Have a great summer!

Sincerely,
Mrs. Israel

Name_____ ID: 1

Summer Work

Date_____ Period____

Solve each equation.

1) $46(x - 18) + 2(x + 50) = 38x + 66x$

2) $67x - 27(x - 40) = 35(x + 52)$

3) $-11x - 40x = -(32 + 70x) - 37(x - 72)$

4) $49(16 - 64m) + 67(53m - 72) = -28m + 39m$

5) $22(x - 20) = -64(x + 23)$

6) $-21(r + 75) = -11(55 + r)$

7) $3b + 35b = 75(b + 72) - 72(b + 75)$

8) $-58(1 - 66x) = -58(-67x + 24)$

9) $51(r - 47) = -60(26 - r)$

10) $3p + 54(-25 - 30p) = 18(-75 - 46p) + 45p$

11) $-3(61m + 73) = 2(1 + 19m)$

12) $8(x - 2) = 9x + 6(x - 19)$

13) $21(21v + 42) = 28(30v + 3)$

14) $-70(n - 38) = -14(n + 50)$

15) $-30(15r + 46) = -450r - 796$

16) $-2(x + 35) + 9x = -(36x + 69) + 42$

17) $20(1 + 2x) = -(-63x + 72)$

18) $-65(x + 13) = -39(x - 3)$

19) $-46 + 44(x + 35) = -38(x - 35)$

20) $-29n - 35 + 43 - 30n = -45(n - 10) + 17(n - 26)$

21) $38 + 7(p - 1) = 7p + 274$

22) $-64(n + 67) - 35 = -64(n - 61)$

23) $72(-65 + 33n) = 58(28n + 36)$

24) $-36(n + 61) = 4(74n - 51)$

25) $42(47k + 23) = -14(-8k + 64)$

26) $17(1 - 11a) = -6(a - 33)$

27) $-42(m - 63) = -70(m - 17)$

28) $-36(25x - 38) = -42(1 + 55x)$

29) $24(1 - 20x) = -12(x - 2)$

30) $-4441 - 75m = 28 - 75(m + 15)$

31) $6(v - 66) = 16v + 17(v - 36)$

32) $-68 - 60(x - 26) = -6(8 + 64x) - 61x$

33) $38 + v + 66v - 67 = 75(v - 53) + 62(v - 12)$

34) $18r - 61r = 10(-3r - 2) - 28(r - 35)$

35) $7(x + 49) + 21(x - 28) = 25x + 71 + 44$

36) $-38(m - 42) = -10m + 10(8m + 30)$

37) $35(b + 63) = 40(b + 54)$

38) $27(x - 5) - 13(x + 61) = 37x - 55x$

39) $-45 - 27(r - 28) = 19(72 - 36r)$

40) $-73 + 11(10 + 75m) = 58(-44 + 11m) - 29$

41) $y = \dfrac{6}{5}x - 3$

42) $y = -\dfrac{7}{4}x + 2$

43) $y = 6x - 1$

44) $y = -\dfrac{5}{3}x$
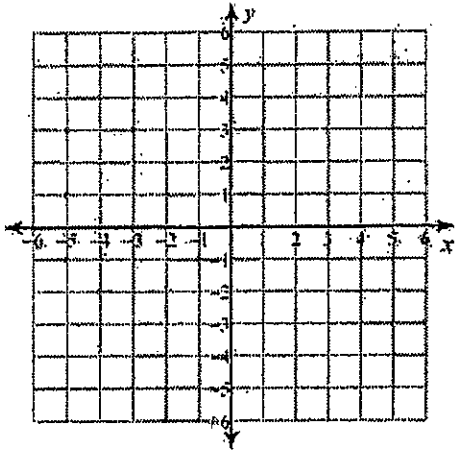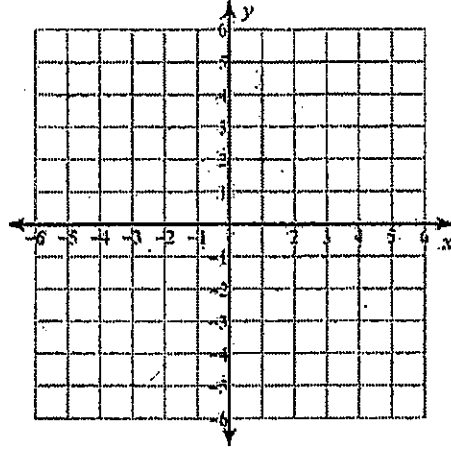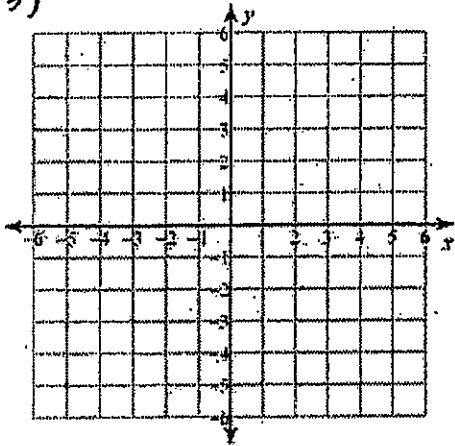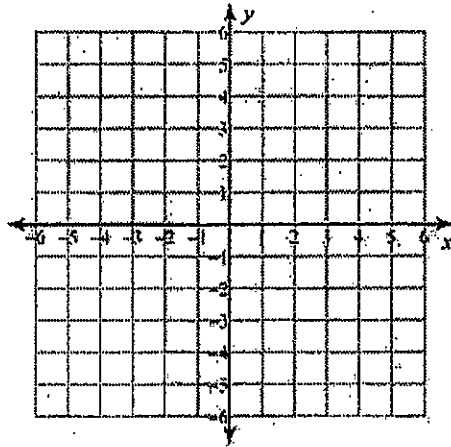
#41 - 50 :

Sketch the graph of each line.
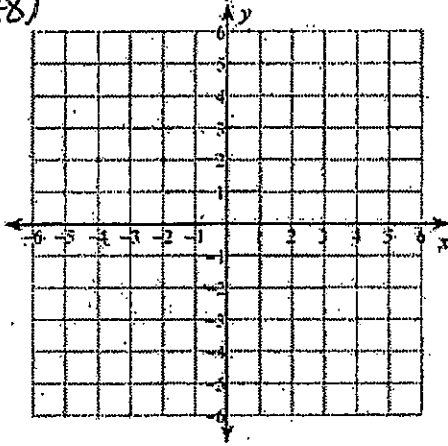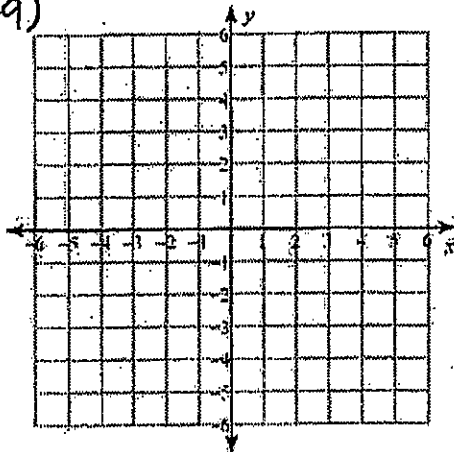(include at least two points!)

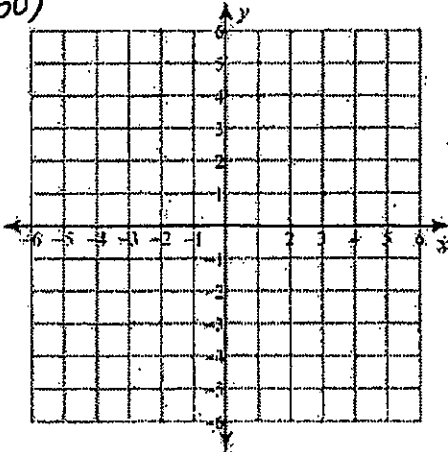45) $-y = -5 - \dfrac{9}{4}x$
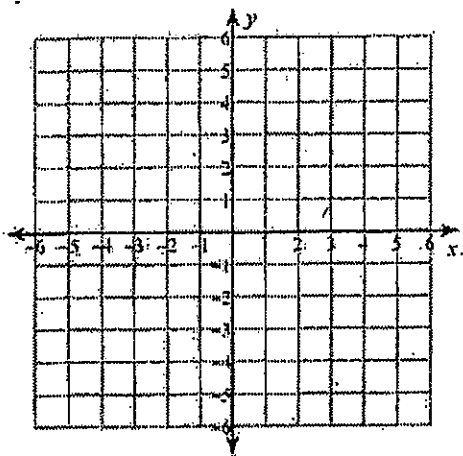
46) $-y + 2 = 0$
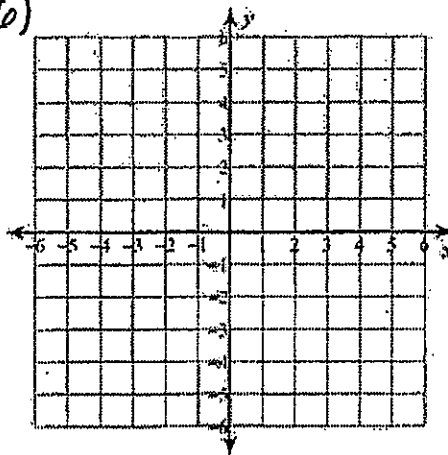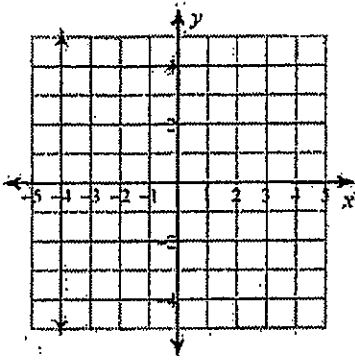
47) $3x + y + 3 = 0$
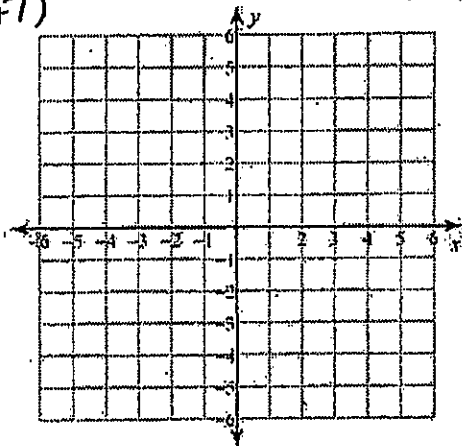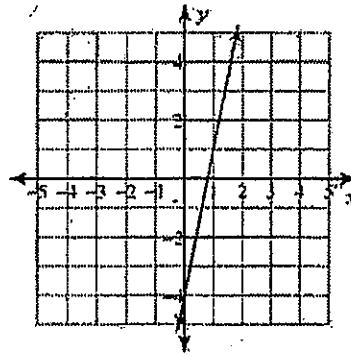
48) $15 = 6x - 15y$

49) $-3 = -y$

50) $-3y - 6 = -x$

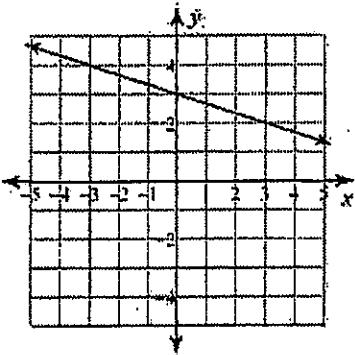Write the slope-intercept form of the equation of each line.
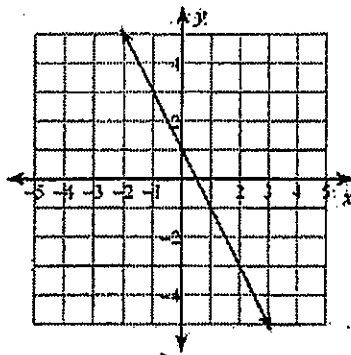
51)

52)

53)

54)

55)
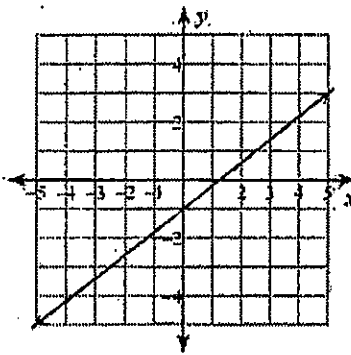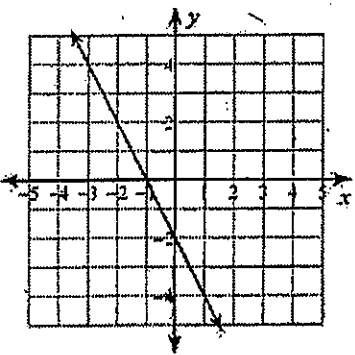
56)

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

57) Slope $= 4$, y-intercept $= 1$

58) Slope $= \dfrac{1}{4}$, y-intercept $= 4$

59) Slope $= -\dfrac{2}{3}$, y-intercept $= -2$

60) Slope $= \dfrac{1}{4}$, y-intercept $= -3$

61) Slope $= 1$, y-intercept $= 2$

62) Slope $= 1$, y-intercept $= -4$

Write the slope-intercept form of the equation of each line.

63) $5x - 7y = 7$

64) $y = -6$

65) $x + y = -8$

66) $x + y = 4$

67) $9x + y = -3$

68) $7x + 4y = 24$

69) $0 = x + 4$

70) $y + 4 = -\dfrac{9}{10}(x - 5)$

71) $0 = x - 2$

72) $y = \dfrac{1}{2}(x + 5)$

73) $y + 4 = \dfrac{9}{5}(x + 5)$

74) $y + 2 = -3(x + 2)$

Write the slope-intercept form of the equation of the line through the given point with the given slope.

75) through: $(-5, 3)$, slope $= -\dfrac{5}{6}$

76) through: $(-5, -5)$, slope $=$ undefined