Review Packet for Incoming Geometry c/p and Geometry/~~Trig~~ Honors Students
Geometry/~~Trig~~ Honors students are also responsible for additional work # 76 – 90
All work is to be shown and stapled to the review. It will be checked on the second day of class.

*Name*_____ *Teacher*_____

Simplify

1. $-3 + (-8) + 12$

2. $13 - 7 - 15$

3. $(8)(-6)(-1)$

4. $-150 \div -6$

5. $\frac{-5}{6} - \frac{5}{9}$

6. $\frac{-3}{8} \cdot \frac{-4}{15}$

7. $\frac{-5}{12} \div \frac{15}{36}$

8. $(-2)(2)^2$

9. $(-3)^3(-2)^2$

10. $-15 + 23 - 8$

Solve for x

11. $7x - 5 = 2x - 20$

12. $-x - 4 = -3x - 16$

13. $5x + 2(3x + 1) = 3x + 5$

14. $5[2 - (2x - 4)] = 2(5 - 3x)$

15. $4(x + \frac{1}{2}) = 8(x + \frac{3}{4})$

16. $7x - 2(x + 6) = -2$

17. $\frac{x+3}{12} = \frac{5}{6}$

18. $\frac{9}{x+2} = \frac{3}{x-2}$

19. $\frac{x}{3} + \frac{4}{5} = 2x - \frac{5}{6}$

Solve and graph on a number line

20. $8x \leq 7x - 4$ *21.* $-3x + 7 < 2$ *22.* $7 - \frac{1}{2}x \leq 1$ *23.* $3x \geq 12$ *Or* $4x \leq 10$

24. $11 \leq x + 3 < 14$

Find the slope and the y intercept for each equation below

25. $3x + 2y = 8$

26. $y = -2x + 7$

27. $x = 3$

28. $y = 3$

29. $x + y = 3$

Given the two points, find the slope

30. (5, - 1) and (3, 2)

31. (- 3, -6) and (9, 2)

32. (7, 3) and (- 2, 5)

33. (7, 2) and (7, 5)

34. (0, - 1) and (2, -1)

For # 35 – 39, write the equation of the line connecting the points in
A. Point Slope form

B. Slope Intercept form

C. Standard form

40. Given the equation, y = 3x + 7, what is the slope of the line parallel to this line?

41. Given the equation, 2x + y = 8, what is the slope of the line perpendicular to this line?

42. What is the slope of a line that is parallel to a vertical line?

43. What is the slope of a line perpendicular to a horizontal line?

Using graph paper, graph each of the following

44. $y = 2x + 1$

45. $3x + y = 9$

46. $2x + 4y = 8$

47. $y = 3$

48. $x = -3$

Factor

49. $7x^2 + 21$

50. $25\,a\,b^4 + 20\,a^3b^2$

51. $4\,x^3\,y - 16\,x^3 + 24\,y$

52. $3\,x^2\,t^3 + 15\,x\,t^2$

53. $m\,r + 3m + 2r + 6$

54. $x\,y + 5x + 3y + 15$

55. $x^2 - 49$

56. $4\,x^2 - 25$

57. $x^2 + 6x + 9$

58. $49\,x^2 - 4\,y^2$

59. $x^2 + 14\,x + 24$

60. $x^2 + 6x + 8$

61. $x^2 + 10x - 39$

62. $x^2 - x - 6$

Factor completely

63. $4x^2 - 4$

64. $2x^2 + 4x + 24$

65. $3x^2 - 6x - 45$

Solve by factoring and using the zero product property

66. $(x + 1)(x - 5) = 0$

67. $x^2 + 13x + 22 = 0$

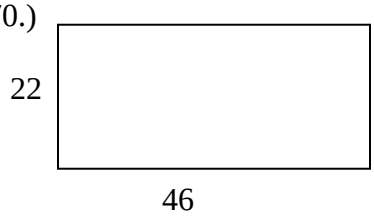
68. $x^2 - 3x = 18$

69. $x^2 - 2x - 15 = 0$

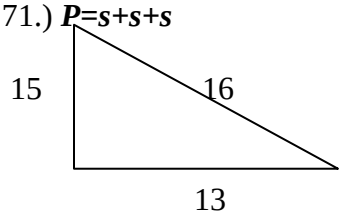
Basic Geometry and using formulas.

Find the perimeter. P=2l+2w

70.)



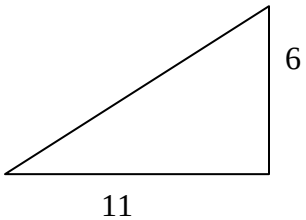
71.) ***P=s+s+s***



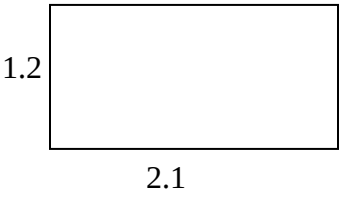
Find the area.

72.)

A= $\frac{1}{2}$bh

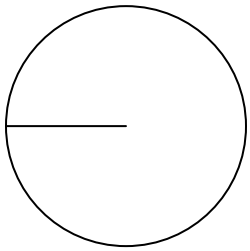


73.) **A=*bh***



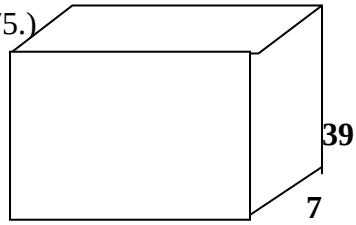
Find the a.) circumference and b.)area. $C = \pi d$ *or* $2 \pi r$, $A = \pi r^2$

74.)
Radius = 3



Volume
$V = lwh$

75.)



FOR GEOMETRY/ ~~TRIG~~ HONORS STUDENTS ONLY

Solve each absolute value equation

76. $|x + 5| = 7$ *77.* $|2x - 3| = 9$ *78.* $2|x - 8| = -4$

Solve and graph on a number line the following absolute value inequalities

79. $|3x - 2| < 7$ *80.* $|x + 9| > -6$ *81.* $|4x - 2| \geq 0$

Write an equation and solve:

82. The difference between twelve and the product of five and a number is 7. Find the number.

83. Three times the sum of a number and 4 is 15. Find the number.

84. The sum of two different numbers is 16. If the smaller number is 2 less than the larger number, find both numbers.

Solve each system by BOTH elimination and substitution

85. $\begin{cases} 3x + y = 13 \\ 2x - y = 2 \end{cases}$ *86.* $\begin{cases} y = -3x \\ x - 6y = 38 \end{cases}$ *87.* $\begin{cases} 2x + 3y = 4 \\ -4x - 6y = -8 \end{cases}$

Graph each absolute value function and state the domain and range.

88. $y = |x - 3| - 2$ *89.* $y = 2|x + 1| - 5$

Graph the system of inequalities and label the solution set S

90. $\begin{cases} x - 2y \leq 8 \\ x + y \geq 5 \end{cases}$