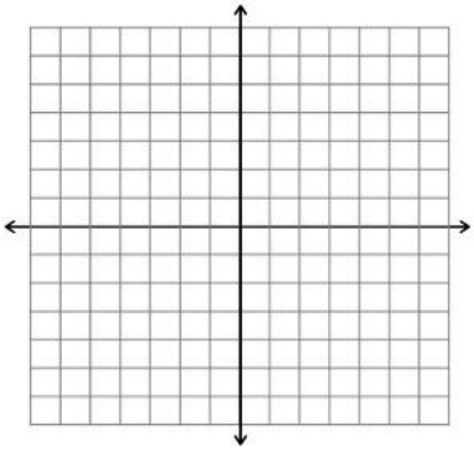
Name _____

# Honors Geometry Summer Review

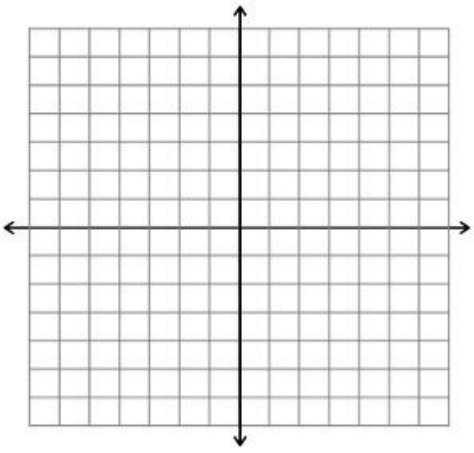
The following questions are review of basic Algebra 1 concepts that are an essential foundation to success in Geometry. All concepts were taught in middle school. Step-by-step solutions to similar questions may be viewed at the link below. **Show your work!** Do not just write down answers alone.
http://www.mathtv.com/videos_by_playlist?c=1&playlist_id=27675

1. Solve: $4x = -20$

2. Find the equation, and graph the line with slope = -4/3 and y-intercept 5.



3. Find the slope and y-intercept for $-2x + y = -4$. Then draw the graph.



4. Find the slope of the line containing (3, -1) and (3, 4).

5. Find the slope through (-2, 1) and (5, -4).

6. Find the perimeter of a rectangle with a width of 5 yards and a length of 8 yards.

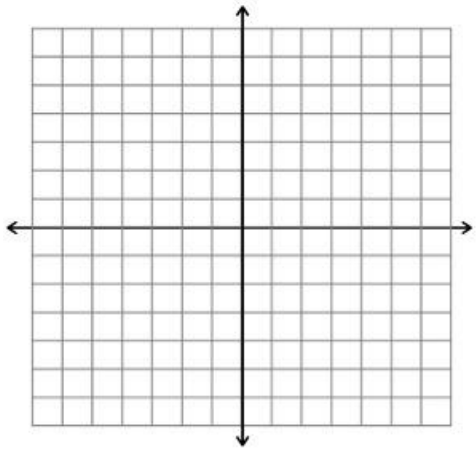
7. Solve: 4a + 5 = 2a – 7.

8. Solve 5(x – 3) + 2 = 5(2x – 8) – 3

9. Solve 2(x + 3) = 10

10. Solve 5x – 8x + 3 = 4 – 10

11. Graph $y = -\frac{1}{3}x + 2$



This next problems are not at the above link. If you do not remember how to do them, search online for examples.

12. Find the distance and midpoint of the segment whose endpoint are (4,-5) and (-3,8).

13. Factor $x^2$ -5x + 6.

14. Solve using the quadratic formula.

$0 = 3x^2 + 2x - 1$