

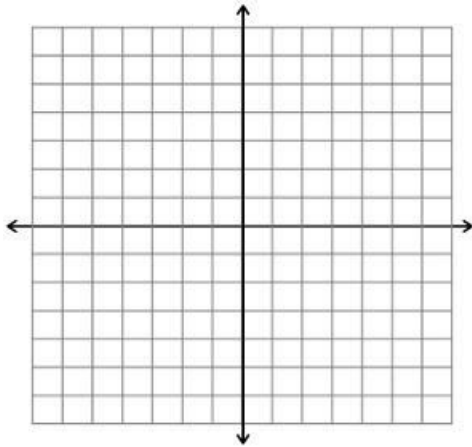
Honors Geometry Summer Review

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. Search the content of the problem if help is needed.

This assignment is due the 2nd day of class and will be **graded for accuracy and used as your first quiz.**

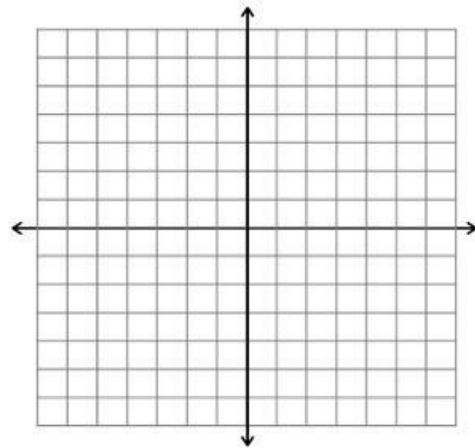
1. Solve: $4x - 8 = 32$

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



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

4.



Calculate the slope of the line containing the points $(3, -1)$ and $(3, 4)$.

5. Calculate the slope of the line passing through $(-2, 1)$ and $(5, -4)$.

6. What is 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 $5(x - 3) + 2 = 5(2x - 8) - 3$

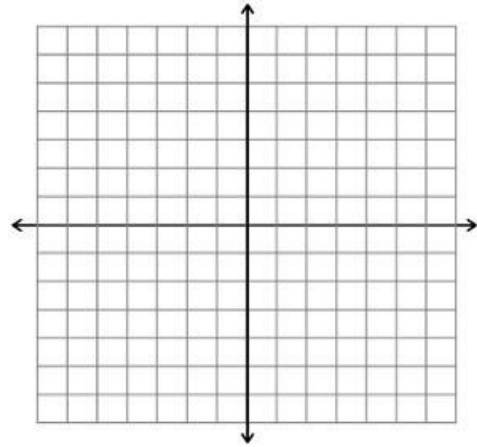
9. Solve $2(x + 3) = 10$

10. Solve $5x - 8x + 3 = 4 - 10$

11. Factor:

a) $x^2 - 5x + 6$ and b) $x^2 - 2x - 48$

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



13. Given a segment whose endpoints are $(4, -5)$ and $(-3, 8)$ find the: (show work)

a) distance

b) midpoint

14. Solve using the quadratic formula.

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

15. Evaluate: $3w - 6$ when $w = -5$.

16. Given the line $y = 3x - 4$,

a) what is the slope of the line parallel to this line?

b) what is the slope of the line perpendicular to this line?