

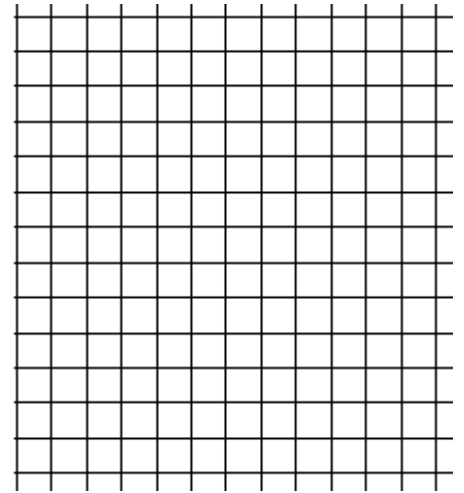
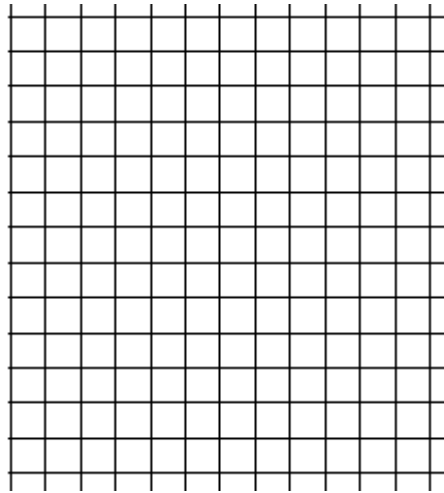
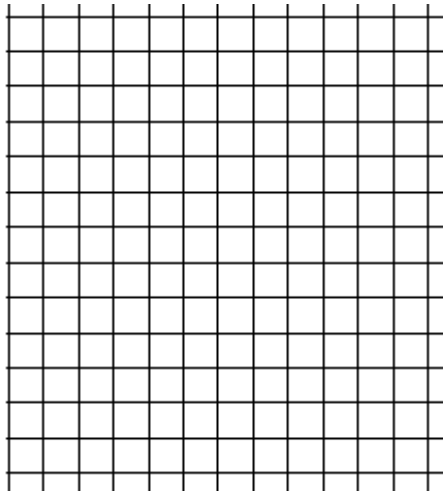
HW: 2x2 Systems of Equations Review

I. In Problems 1-3, solve the system of equations by graphing.

1.)
$$\begin{cases} y = x - 3 \\ y = \frac{1}{3}x + 1 \end{cases}$$

2.)
$$\begin{cases} 3x + 2y = 6 \\ 2x - y = 11 \end{cases}$$

3.)
$$\begin{cases} 4x - 3y = 12 \\ y = \frac{4}{3}x + 1 \end{cases}$$



II. In Problems 4-6, solve the system of equations by substitution.

4.)
$$\begin{cases} y = 2x - 8 \\ y = \frac{5}{3}x + 7 \end{cases}$$

5.)
$$\begin{cases} 4x + 5y = 1 \\ 2x - 3y = 5 \end{cases}$$

6.)
$$\begin{cases} 7x - 2y = 8 \\ 5x + 6y = 10 \end{cases}$$

III. In Problems 7-11, solve the system of equations by elimination.

7.)
$$\begin{cases} 9x + 4y = 15 \\ 5x - 7y = 10 \end{cases}$$

8.)
$$\begin{cases} 6x = 12 - 22y \\ -3x + 11y = 91 \end{cases}$$

9.)
$$\begin{cases} 11x + 12y = 20 \\ 5x = -3y + 14 \end{cases}$$

IV. Given the triangle in Problem 10, find all of its altitudes, all of its perpendicular bisectors, and all of its medians. Then find the coordinates of the orthocenter, circumcenter, and centroid. SHOW YOUR WORK ON ADDITIONAL PAGES AS IT WON'T ALL FIT HERE!

The triangle with vertices: A(1, 2), B(5, -3), C(7, 8)