Simultaneous Linear Equations - Step-by-Step Lesson

Solve this system of equations by graphing. First graph the equations, and then write the solution.

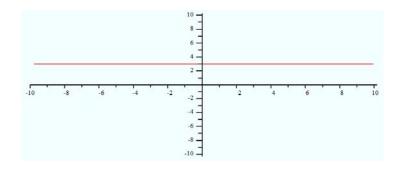
$$y = 3$$

$$y = \frac{4}{2}x - 2$$

Explanation:

Step 1) The first equation is y = 3

This equation tells you that every y-value is 3. Plot some points that have a y-value of 3, like (0, 3 and (1, 3), and then draw a line connecting them.



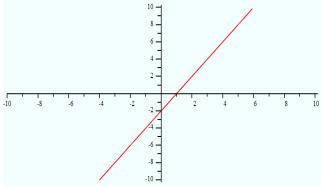
Step 2) The second equation is:

$$\frac{4}{2}x-2$$

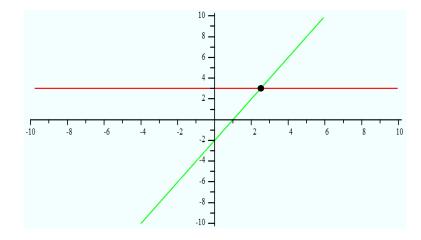
The y-intercept is -2. Plot the point (0, -2).

The slope is $\frac{4}{2}$. Move up 4 and right 2 to find another point on the line.

Draw a line connecting them.



Step 3) finally, identify the point of intersection.



The lines intersects at (2.5, 3), so the solution to the system of equations is (2.5, 3).