Solving Systems with Fractions or Decimals

ex.1) $6\left(\frac{1}{2}x+\frac{2}{3}y=1\right) = \frac{6}{2}x+\frac{12}{3}y=6$

$\Rightarrow 3x+4y=6$

$12\left(\frac{1}{4}x-\frac{1}{3}y=\frac{5}{2}\right)$

$\frac{12}{4}x-\frac{12}{3}y=\frac{60}{2} \Rightarrow 3x-4y=30$

Solve by Elimination;

$$\begin{array}{r} 3x+4y=6 \\ +\ 3x-4y=30 \\ \hline 6x=36 \\ x=6 \end{array}$$

$3x+4y=6$

$3(6)+4y=6$

$4y=6-18$

$4y=-12$

$y=-3$