Directions: Pick a multiplier and an equation to create opposite coefficients.

$$\begin{cases} 4x-2y=10 \\ x+3y=11 \end{cases}$$

$$\begin{cases} 4x-2y=10 \\ -4(x+3y=11)-4 \end{cases}$$

Multiply the bottom by -4

$$\begin{cases} 4x-2y=10 \\ -4x-12y=-44 \end{cases}$$

$$\begin{cases} 2x-8y=10 \\ x+4y=12 \end{cases}$$

$$\begin{cases} 2x-8y=10 \\ 2(x+4y=12)2 \end{cases}$$

Multiply the bottom by 2.

$$\begin{cases} 2x-8y=10 \\ 2x+8y=24 \end{cases}$$

$$\begin{cases} -3x-2y=9 \\ x+8y=-6 \end{cases}$$

$$\begin{cases} 4(-3x-2y=9)4 \\ x+8y=-6 \end{cases}$$

Multiply the top by 4.

$$\begin{cases} -12x-8y=36 \\ x+8y=-6 \end{cases}$$

$$\begin{cases} 10x-4y=10 \\ 5x-2y=-8 \end{cases}$$

$$\begin{cases} 10x-4y=10 \\ -2(5x-2y=-8)-2 \end{cases}$$

Multiply the bottom by -2

$$\begin{cases} 10x-4y=10 \\ -10x+4y=16 \end{cases}$$

$$\begin{cases} 7x-2y=9 \\ 14x+3y=4 \end{cases}$$

$$\begin{cases} -2(7x-2y=9)-2 \\ 14x+3y=4 \end{cases}$$

Multiply the top by -2.

$$\begin{cases} -14x+4y=-18 \\ 14x+3y=4 \end{cases}$$

$$\begin{cases} 4x-2y=10 \\ x+3y=11 \end{cases}$$

$$\begin{cases} 4x-2y=10 \\ -4(x+3y=11)-4 \end{cases}$$

Multiply the bottom by -4.

$$\begin{cases} 4x-2y=10 \\ -4x-12y=-44 \end{cases}$$

$$\begin{cases} x-y=10 \\ 2x-2y=-4 \end{cases}$$

$$\begin{cases} -2(x-y=10)-2 \\ 2x-2y=-4 \end{cases}$$

Multiply the top by -2

$$\begin{cases} -2x+2y=-20 \\ 2x-2y=-4 \end{cases}$$

$$\begin{cases} 16x-6y=1 \\ -4x+2y=-3 \end{cases}$$

$$\begin{cases} 16x-6y=1 \\ 3(-4x+2y=-3)3 \end{cases}$$

Multiply the bottom by 3.

$$\begin{cases} 16x-6y=1 \\ -12x+6y=-9 \end{cases}$$

$$\begin{cases} 9x-2y=60 \\ x+3y=14 \end{cases}$$

$$\begin{cases} 9x-2y=60 \\ -9(x+3y=14)-9 \end{cases}$$

Multiply the bottom by -9.

$$\begin{cases} 9x-2y=60 \\ -9x-27y=-126 \end{cases}$$

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

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

Multiply the top by 3 and the bottom by 2.

$$\begin{cases} 9x-6y=12 \\ 10x+6y=16 \end{cases}$$

$$\begin{cases} 2.5x-4.8y=10 \\ 25x-48y=11 \end{cases}$$

$$\begin{cases} -10(2.5x-4.8y=10)-10 \\ 25x-48y=11 \end{cases}$$

Multiply the top by -10.

$$\begin{cases} -25x+48y=-100 \\ 25x-48y=11 \end{cases}$$