Steps: 1) solve one equation for one variable
(isolate the x or y ~ whichever is easier)

2) substitute the expression you solved for in step 1 into the second equation and solve for the other variable

3) substitute the value from step 2 into one of the original equations and solve for the other variable

4) check your x and y value works in both equations

example $y = 2x - 4$
          $7x - 2y = 5$

Step 1: The first equation is already solved for y so leave it

Step 2: substitute the expression $2x - 4$ for the y in the second equation

$$7x - 2(2x-4) = 5$$
$$7x - 4x + 8 = 5$$
$$3x + 8 = 5$$
$$3x = -3$$
$$\boxed{x = -1}$$

Step 3: Substitute -1 for x in either equation to find y

$$y = 2(-1) - 4$$
$$y = -2 - 4$$
$$\boxed{y = -6}$$

The solution is $(-1, -6)$

check $-6 = 2(-1) - 4$ $7(-1) - 2(-6) = 5$
        $-6 = -2 - 4$ $-7 + 12 = 5$
        $-6 = -6$ ✓ $5 = 5$ ✓

Examples

1) $y = 2x + 3$
   $y = 5x$

$2x + 3 = 5x$
$3 = 3x$
$\boxed{1 = x}$

$y = 5(1)$
$\boxed{y = 5}$

$(1, 5)$

2) $4x + 2y = 0$

$y = \frac{1}{2}x - 5$

$4x + 2\left(\frac{1}{2}x - 5\right) = 0$

$4x + x - 10 = 0$

$5x - 10 = 0$
$5x = 10$
$\boxed{x = 2}$

$y = \frac{1}{2}(2) - 5$

$y = 1 - 5$
$\boxed{y = -4}$

$(2, -4)$

3) $x = 5y + 3$
   $2x + 4y = -1$

$2(5y + 3) + 4y = -1$
$10y + 6 + 4y = -1$
$14y + 6 = -1$
$14y = -7$
$\boxed{y = -\frac{1}{2}}$

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

$x = -\frac{5}{2} + 3$

$\boxed{x = \frac{1}{2}}$

$\frac{-5}{2} = -\frac{5}{2}$

$\frac{3}{1} = \frac{6}{2}$

$\frac{1}{2}$

$\boxed{\frac{1}{2}, -\frac{1}{2}}$