Multiply the first equation by -4: -8x - 4y = -76

Add this to 3x + 4y = 1 to get: -5x = -75

Solve for x to get x = 15, and substitute this into the first equation:

$$2(15) + y = 19 \text{ or } 30 + y = 19, \text{ so } y = -11$$