

Solve the second equation for x : $x = 14 + 5y$

Substitute $14 + 5y$ for x in the first equation: $4(14 + 5y) + 2y = 34$

Simplify: $56 + 20y + 2y = 34$ or $56 + 22y = 34$

Solve for y : $22y = -22$, so $y = -1$

Substitute this value for y into the equation you started with: $x = 14 + 5(-1) = 14 - 5 = 9$