

Unit 6: Solving Systems of Linear Equations
6.2 Solving Systems of Linear Equations by Substitution

Substitution Method:

Ex. Solve $4x + 5y = 26$
 $3x = y - 9$

- Isolate a single variable in one of the two equations (**If possible choose a variable with a coefficient of 1**)
- Substitute the expression into the other equation and solve one of the variables
- Substitute the first variable solution into either original equation and solve for the remaining variable
- Verify your solution by substituting into both original equations

Ex. Solve $2x + y = 13$
 $x - 0.4y = -16$

Ex. Solve $\frac{2}{3}x + \frac{3y}{5} = -2$
 $\frac{x}{6} - \frac{y}{2} = -7$

Ex. At a dance recital, there were 220 people. Tickets cost \$9 for an adult and \$6 for a child. The dance collected \$1614 in ticket sales. How many adults and how many children attended the recital?

Practice: WS163 – work on separate sheet
pg. 474/#4b, 5, 6, 7, 9 – 12