Unit III – First Degree Relations with Two Placeholders
Part D – Solution Sets for Systems of Two Open Sentences
Lesson 4 – Algebraic Solution for Equations - Elimination by Substitution

Find the solution set for each of the following systems of simultaneous linear equations by substituting to temporarily eliminate one of the placeholders.

1. $y = 2x$
   $x + y = 9$

2. $x = y + 1$
   $x + 4y = 11$

3. $2x + 3y = 22$
   $x = 4y$

4. $y = 3x - 1$
   $2x + y = 14$

Find the solution set for each of the following systems of simultaneous linear equations by substituting to temporarily eliminate one of the placeholders. You may need to rewrite one of the equations to find out what "x" is or what "y" is.

5. $2x - y = 5$
   $-x + y = -3$

6. $9x + 7y = 21$
   $2x = 7 - y$

7. $\dfrac{x}{3} - \dfrac{y}{6} = \dfrac{1}{2}$
   $0.3x + 0.7y = 4.7$

8. $2x - y = 8$
   $^{-}4x = {}^{-}23 - 3y$

Unit III – First Degree Relations with Two Placeholders
Part D – Solution Sets for Systems of Two Open Sentences
Lesson 4 – Algebraic Solution for Equations - Elimination by Substitution

Find the solution set for each of the following systems of simultaneous linear equations by substituting to temporarily eliminate one of the placeholders.

1. S = {(3, 6)}

2. S = {(3, 2)}

3. S = {(8, 2)}

4. S = {(3, 8)}

Find the solution set for each of the following systems of simultaneous linear equations by substituting to temporarily eliminate one of the placeholders. You may need to rewrite one of the equations to find out what "x" is or what "y" is.

5. S = {(2, $^-$1)}

6. S = {($\frac{28}{5}$, $\frac{^-21}{5}$)}

7. S = {(4, 5)}

8. S = {($\frac{1}{2}$, $^-$7)}