**Pre-Assessment Key**

**For the next system of linear equations:**

 *x* + 2*y* =  3

2*x* – 3*y* = 5

**(*a*). Find the solution using the Substitution Method**

Label the equations as (1) and (2):

Substitute the found value for *y* in (3) to find the value for *x*:

 *x* + 2*y* =  3 (1)

2*x* – 3*y* = 5 (2)

*x* = ( 11/ 7) 3

*x* = 22/7 – 3

*x* = 22/7 – 21/7

*x* = 1/7

Solve for *x* in equation (1) and label this new equation (3):

 *x* = *y* 3 (3)

Substitute this expression for *x* in equation (2):

Solution of the system:

(*x, y*) = (

2(*y* 3) – 3*y* = 5

Solve this equation to find a value for y:

*y* 6 – 3*y* = 5

7y – 6 = 5

7y = 11

 y =  11/ 7

**(*b*). Write the system of equations in matrix form:**

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 *x* + 2*y* =  3

2*x* – 3*y* = 5