# Unit IV – First Degree Relations with Three or More Placeholders
## Part A – Solution Sets
## **Lesson 1 – One Open Sentence**

For the following equation, determine whether the given ordered triples are solutions.

$$3x - 2y + 4z = 19$$

1. $(^{-}2 , 3 , 7)$
2. $(3 , ^{-}5 , 0)$
3. $(^{-}5 , ^{-}7 , 5)$
4. $(0 , ^{-}3 , 3)$
5. $(1 , ^{-}2 , 3)$
6. $(7 , 1 , 6)$

For the following equation, complete each of the ordered triples so it will be a solution.

$$2x - y + 3z = 9$$

7. $(\quad , 4 , 1)$
8. $(6 , \quad , 5)$
9. $(1 , \quad , 1)$
10. $(^{-}7 , 1 , \quad)$
11. $(2, \quad , 2)$
12. $(\quad , 1 , 0)$

# EXTRA PRACTICE — Answer Key



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For the following equation, determine whether the given ordered triples are solutions.

$$3x - 2y + 4z = 19$$

1. 16 = 19 False (−2, 3, 7) is not a solution

2. 19 = 19 True (3, −5, 0) is a solution

3. 19 = 19 True (−5, −7, 5) is a solution

4. 18 = 19 False (0, −3, 3) is not a solution

5. 19 = 19 True (1, −2, 3) is a solution

6. 43 = 19 False (7, 1, 6) is not a solution

For the following equation, complete each of the ordered triples so it will be a solution.

$$2x - y + 3z = 9$$

7. $x = 2$ Complete Solution is (2, 4, 3)

8. $y = 18$ Complete Solution is (6, 18, 5)

9. $y = -4$ Complete Solution is (1, −4, 1)

10. $z = 8$ Complete Solution is (−7, 1, 8)

11. $y = 1$ Complete Solution is (2, 1, 2)

12. $x = 5$ Complete Solution is (5, 1, 0)