Module 7 Lesson 1

Try This 1 – 7 Possible Solutions

TT 1.

a. There are an infinite number of combinations that would satisfy the equation. For example,

x = -7 and y = +12 is a solution and $x = 3\frac{1}{2}$ and $y = 1\frac{1}{2}$ is a solution.

b.

WHOLE NUMBER SOLUTIONS TO THE EQUATION x + y = 5

<i>x</i> -value	<i>y</i> -value	Check Sum
0	5	5
1	4	5
2	3	5
3	2	5
4	1	5
5	0	5

TT 2.

a.

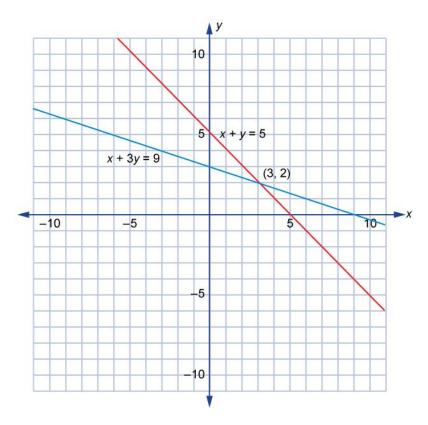
SOLUTIONS TO THE EQUATION

$$x + 3y = 9$$

<i>x</i> -value	<i>y</i> -value
9	0
6	1
3	2
0	3

b. The combination x = 3 and y = 2 satisfies both equations.

TT 3 –TT 5. The student's graph should look like the following. The blue line represents the equation x+3y=9. The red line represents the equation x+y=5. The two lines intersect at (3, 2).



- TT 6. The coordinates are the same as the those identified in the solution to TT 2.b.
- **TT 7.** You can check that the coordinates of the point of intersection satisfy both equations as follows:

LS RS
$$x+y$$
 5
 $= 3 + 2$
 $= 5$

$$LS = RS$$

LS RS
$$x+3y$$
 9
 $= 3 + 3 2$
 $= 9$

$$LS = RS$$

Since the coordinates x = 3 and y = 2 make the left side and the right side in each verification table equal, the coordinates are shown to satisfy both equations.