NAME:

**Lesson 7.2: Solving Systems of Equations Algebraically**

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This assignment includes multiple choice and short answer questions. For multiple choice questions, select the best answer. Each is worth 1 mark. Marks assigned to short answer questions are indicated for each question. Be sure to show all necessary work.

**/1** 1. The *y*-value of a solution to the system  and  is

1. –9
2. –2
3. 7
4. 18

Answer:

*Use the following information to answer question 2.*Terry tried to solve the system  and  as follows:

|  |  |
| --- | --- |
| **Line 1** |  |
| **Line 2** |  |
| **Line 3** |  |
| **Line 4** | 5 = 5 |

**/1** 2. Terry concluded that there are an infinite number of solutions to the system. Terry’s first

error appears in the line

1. 2
2. 3
3. 4
4. Terry did not make any errors.

Answer:

**/1** 3. When using an elimination strategy to solve the system  and ,

the variable that can be eliminated is

1. *a*
2. *a*2
3. *t*
4. an elimination strategy cannot be used with this system

Answer:

**/1** 4. The system  and  will have

1. 0 real solutions
2. 1 real solution
3. 2 real solutions
4. an infinite number of real solutions

Answer:

**/1** 5. The statement that is **false** is

1. A system of quadratic-quadratic equations can have exactly one solution.
2. A system of quadratic-quadratic equations has no solutions if the graphs do not intersect.
3. It is impossible for a system of linear-quadratic equations to have an infinite number of solutions.
4. The solution to a system of equations can be verified by substituting the solution into one of the original equations.

Answer:

**/3** 6. Solve the following system algebraically. Verify the solution.  
  
 

Answer:

**/3** 7. Two integers have a sum of 11. The sum of the greater integer squared and 30 times the

smaller integer is 205. What are the two integers?

Answer:

**/11**

You have completed *Lesson 7.2 Explore Your Understanding Assignment*. Please continue your exploration with *Lesson 7.3.*