Quiz 1.7: Systems of Linear Equations

Multiple Choice: *Choose the letter that corresponds to the correct answer. Write the answer in your answer sheet.*

1. Equations whose graphs are parallel are called:

   A. Consistent and Independent Equations
   C. Inconsistent and Independent Equations
   B. Consistent and Dependent Equations
   D. Inconsistent and Dependent Equations

2. Systems of linear equations with infinitely many solutions are called:

   A. Consistent and Independent Equations
   C. Inconsistent and Independent Equations
   B. Consistent and Dependent Equations
   D. Inconsistent and Dependent Equations

3. Systems of linear equations with exactly one solution are called:

   A. Consistent and Independent Equations
   C. Inconsistent and Independent Equations
   B. Consistent and Dependent Equations
   D. Inconsistent and Dependent Equations

4. When solving word problems, the dependent variable is usually represented as:

   A. d B. m C. x D. y

5. Equations that are true for the same pairs of numbers are called:

   A. Consistent and Dependent Equations
   C. Consistent and Independent Equations
   B. Linear Equations
   D. System of Linear Equations

6. The system $\begin{cases} x - 2y &= 9 \\ x + 3y &= 14 \end{cases}$ is consistent and independent. What is the characteristic of their graphs?

   A. Coinciding B. Intersecting C. Parallel D. Perpendicular

7. A multicab passenger is charged P10 for the first 4 km and an additional P2 per succeeding kilometer as fare. Which equation represents this situation?

   A. $y = 2x + 10$ B. $y = 4x + 10$ C. $y = 10x + 2$ D. $y = 10x + 4$

8. When solving word problems, the independent variable is usually represented as:

   A. d B. m C. x D. y

9. The graphs of $8x + 2y = 7$ and $y = -4x + 1$ are parallel. How many solutions exist for this system of linear equations?

   A. Exactly one B. Imaginary C. Infinitely many D. None

10. A long-distance runner started a course running at an average speed of 6 mph. One and one-half hours later, a cyclist traveled the same course at an average speed of 12 mph. How long after the runner started did the cyclist overtake the runner?

    A. 2 hours B. 2.5 hours C. 3 hours D. 3.5 hours

11. Reena begins to save for a new pair of shoes that cost P2,375.00. She already has P500.00 and plans to save P75.00 per week. How long will it take her to save the amount for the shoes?

    A. 10 weeks B. 15 weeks C. 20 weeks D. 25 weeks

12. The distance between two towns is 380 km. At the same moment, a passenger car and a truck start moving towards each other from different towns. They meet 4 hours later. If the car drives 5 kph faster than the truck, what is the speed of the truck?

    A. 45 kph B. 48 kph C. 51 kph D. 54 kph

13. What kind of system is $\begin{cases} 3x + 5y &= 15 \\ 4x - 7y &= 10 \end{cases}$?

    A. Consistent and Dependent
    C. Inconsistent and Dependent
    B. Consistent and Independent
    D. Inconsistent and Independent

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