PEP Grade 7 Math — Unit 4: Systems of Linear Equations in Two Variables · Unit Test (Basic)

PEP · Grade 7 · Term 2 · Mathematics · Unit Test · Basic

AI-generated practice paper · original study aid, not an official examination paper · 40 questions · 100 points

Name: _____ Date: _____ Score: _____

Answer all questions. This paper is worth 100 points. Show your working where appropriate.

I. Multiple Choice

1. Which of the following is a solution to the system: x + y = 5 and x - y = 1?
   A. x = 2, y = 3
   B. x = 3, y = 2
   C. x = 4, y = 1
   D. x = 1, y = 4

2. If 2x + y = 8 and x = 3, what is the value of y?
   A. 2
   B. 3
   C. 4
   D. 5

3. What is the value of x in the system: x + 2y = 10 and 3x - 2y = 2?
   A. 1
   B. 2
   C. 3
   D. 4

4. Which pair of equations forms a consistent independent system?
   A. y = 2x and y = 2x + 1
   B. y = x and y = -x
   C. x + y = 4 and 2x + 2y = 8
   D. x - y = 0 and x + y = 2

5. If a system has no solution, what can be said about the lines?
   A. They are coincident.
   B. They are perpendicular.
   C. They intersect at one point.
   D. They are parallel.

6. Solve for y in the equation: 4x + 2y = 12 when x = 1.
   A. 4
   B. 5
   C. 6
   D. 7

7. Which method is best for solving the system: x = 3y and 2x + y = 10?
   A. Graphing
   B. Substitution
   C. Elimination
   D. Guessing

8. The sum of two numbers is 15. Their difference is 3. What is the smaller number?
   A. 5
   B. 6
   C. 7
   D. 8

9. In a system of equations, if both equations represent the same line, how many solutions exist?
   A. 0
   B. 1
   C. 2
   D. Infinitely many

10. Which ordered pair satisfies both x + y = 7 and 2x - y = 5?
    A. (4, 3)
    B. (3, 4)