PEP Grade 7 Math — Unit 5: Inequalities and Systems of Inequalities · 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 represents a true inequality?
   A. 3 < 2
   B. 5 > 5
   C. 4 ⩽ 4
   D. 6 ⩾ 7

2. If x = 7, which inequality is satisfied?
   A. x < 5
   B. x > 8
   C. x ⩾ 7
   D. x ⩽ 6

3. What is the solution set for x + 3 > 7?
   A. x > 4
   B. x < 4
   C. x > 10
   D. x < 10

4. Which number is NOT a solution to the inequality x ⩽ -2?
   A. -3
   B. -2
   C. 0
   D. -5

5. Solve: 2x - 1 < 5.
   A. x < 2
   B. x < 3
   C. x > 3
   D. x > 2

6. Which graph represents x ⩾ -1?
   A. An open circle at -1 pointing left
   B. A closed circle at -1 pointing right
   C. A closed circle at -1 pointing left
   D. An open circle at -1 pointing right

7. The inequality 3(x - 1) ⩽ 9 has the solution:
   A. x ⩽ 4
   B. x ⩾ 4
   C. x ⩽ 2
   D. x ⩾ 2

8. If x > 3 and y > 4, which statement must be true?
   A. x + y > 7
   B. x + y < 7
   C. x × y < 12
   D. x - y > 0

9. Which value makes the inequality 1/2x + 1 ⩾ 3 true?
   A. 2
   B. 3
   C. 4
   D. 5

10. What is the smallest integer that satisfies x > -1.5?