PEP Grade 8 Math — Unit 19: Linear Functions • Unit Test (Basic)

PEP · Grade 8 · 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 linear function in the form y = kx + b?
   A. y = x^2 + 3
   B. y = 1/2x - 4
   C. y = $\sqrt{}$(x) + 5
   D. y = 3/x + 1

2. If a function passes through points (0, 5) and (2, 9), what is its slope?
   A. 1
   B. 2
   C. 3
   D. 4

3. What is the y-intercept of the line y = -3x + 7?
   A. -3
   B. 3
   C. 7
   D. -7

4. Which equation represents a horizontal line?
   A. y = 2x
   B. y = -4
   C. x = 3
   D. y = x + 1

5. If y = 4x - 1, what is y when x = -2?
   A. -7
   B. -9
   C. 7
   D. 9

6. What is the slope of the line 2y = 6x - 4?
   A. 2
   B. 3
   C. 4
   D. 6

7. If a line has a slope of -1 and passes through (0, 6), what is its equation?
   A. y = -x + 6
   B. y = x - 6
   C. y = -x - 6
   D. y = 6x - 1

8. Which of the following lines is parallel to y = 5x + 2?
   A. y = 5x - 3
   B. y = -5x + 1
   C. y = 1/5x + 2
   D. y = x + 5

9. What is the x-intercept of the line y = -2x + 8?
   A. 4
   B. 8
   C. -4
   D. 2

II. Multiple Answers

10. Which of the following points lie on the graph of y = 1/3x + 2? (Select all correct answers)