PEP Grade 8 Math — Unit 16: Quadratic Radicals • 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 is a simplified form of √(50)?
   A. √(25) B. 5√(2)
   C. 2√(5) D. 10

2. Which of the following is equal to √(81) + √(49)?
   A. 12 B. 14
   C. 16 D. 18

3. Simplify: 1/√(3) by rationalising the denominator.
   A. 1/3 B. [[frac:√(3)/3]]
   C. 3/√(3) D. √(3)

4. Which expression is undefined in real numbers?
   A. √(4) B. √(0)
   C. √(-9) D. √(1)

5. If √(x) = 7, what is the value of x?
   A. 49 B. 14
   C. 7 D. 28

6. Which of the following is equal to √(72)?
   A. 6√(2) B. 8√(3)
   C. 3√(8) D. 4√(9)

7. What is the simplest form of √(18) × √(2)?
   A. √(36) B. 6
   C. 2√(9) D. 18

8. Which expression has the same value as √(45) - √(20)?
   A. √(25) B. √(5)
   C. 5√(5) D. 2√(5)

9. What is the value of √(121) ÷ √(11)?
   A. 11 B. 10
   C. √(11) D. 1

10. Which of the following is equivalent to [[frac:2√(3)/√(6)]] after simplification?
    A. √(2) B. 2√(2)
    C. 2/√(2) D. 2/3