PEP Grade 6 Math — Unit 3: Cylinders and Cones • Unit Test (Basic)

PEP · Grade 6 · 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 shapes has two circular bases and a curved surface?
   A. Cube
   B. Sphere
   C. Cylinder
   D. Cone

2. What is the shape of the base of a cone?
   A. Rectangle
   B. Triangle
   C. Circle
   D. Square

3. If a cylinder has a radius of 4 cm and height of 10 cm, what is the area of its lateral surface? (Use π ≈ 3.14)
   A. 251.2 cm^2
   B. 125.6 cm^2
   C. 80 cm^2
   D. 314 cm^2

4. Which formula gives the volume of a cone with radius r and height h?
   A. V = πr^2h
   B. V = 1/3πr^2h
   C. V = 2/3πr^2h
   D. V = 2πr^2h

5. A cylindrical can has a diameter of 12 cm and height of 15 cm. What is its volume? (Use π ≈ 3.14)
   A. 1695.6 cm^3
   B. 6782.4 cm^3
   C. 2260.8 cm^3
   D. 565.2 cm^3

6. If the height of a cone is doubled and the radius stays the same, how does the volume change?
   A. It doubles
   B. It halves
   C. It quadruples
   D. It stays the same

7. What is the slant height of a cone with radius 6 cm and vertical height 8 cm?
   A. 10 cm
   B. 12 cm
   C. 14 cm
   D. 16 cm

8. A cone has a volume of 314 cm^3 and a base radius of 5 cm. What is its height? (Use π ≈ 3.14)
   A. 12 cm
   B. 8 cm
   C. 6 cm
   D. 4 cm

9. Which of the following is NOT a property of a cylinder?
   A. Two flat circular faces
   B. One curved surface