Name _____ Class _____ Date _____

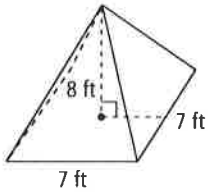
11-5 Standardized Test Prep

Volumes of Pyramids and Cones

Multiple Choice

For Exercises 1–5, choose the correct letter.

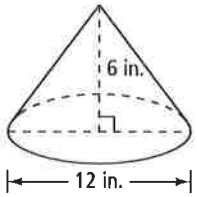
1. What is the volume of the pyramid?



(A) 56 ft^3 (C) 196 ft^3

(B) $130\frac{2}{3}$ ft^3 (D) 392 ft^3

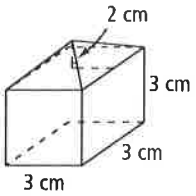
2. What is the volume of the cone, rounded to the nearest cubic inch?



(F) 72 $in.^3$ (H) 905 $in.^3$

(G) 226 $in.^3$ (I) 2714 $in.^3$

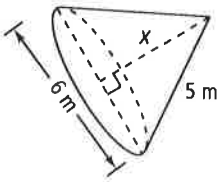
3. What is the volume of the figure?



(A) 15 cm^3 (C) 45 cm^3

(B) 33 cm^3 (D) 54 cm^3

4. What is the value of x, if the volume of the cone is 12π m^3?



(F) 4 m (H) 6 m

(G) 5 m (I) 10 m

5. What is the diameter of a cone with height 8 m and volume 150π m^3?

(A) 7.5 m (B) $5\sqrt{3}$ m (C) $7.5\sqrt{3}$ m (D) 15 m

Short Response

6. **Error Analysis** A student calculates the volume of the given cone as approximately 2094 cm^3. Explain the error in the student's reasoning and find the actual volume of the cone rounded to the nearest whole number.