

Correct. Find and add the volumes of the cylinder and the hemisphere.

$$\text{Volume of cylinder: } \pi r^2 h = \pi(20)^2(50) = \pi(400)(50) \approx 3.14 \cdot 20,000 = 62,800$$

$$\text{Volume of hemisphere: } \frac{1}{2} \cdot \frac{4}{3} \pi r^3 = \frac{2}{3} \pi (20)^3 = \frac{2}{3} \pi \cdot 8,000 \approx \frac{2}{3} \cdot 3.14 \cdot 8,000 \approx 16,747$$

Add the volumes together to find the volume of the silo: $62,800 + 16,747 = 79,547 \approx 80,000$ cubic feet