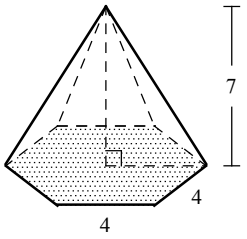
Exercises - Pyramids and Cones

1



The figure above shows a pyramid with regular hexagonal base. The length of each side of the hexagonal face is 4 units and the height of the pyramid is 7 units. What is the volume of the pyramid?

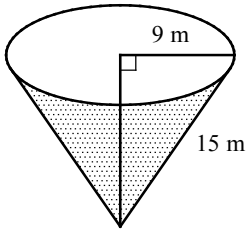
A) $35\sqrt{3}$

B) $56\sqrt{3}$

C) $84\sqrt{3}$

D) $168\sqrt{3}$

2



Water is pouring into a conical reservoir at the rate of 2.4 m^3 per minute. If the radius of the base of the conical reservoir is 9 meters (m) and the length of the lateral edge is 15 m, to the nearest minute, how long will it take to fill up the empty reservoir?

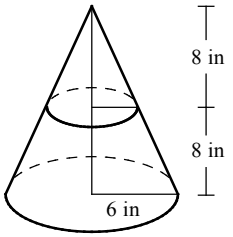
A) 212

B) 318

C) 424

D) 530

3



A plane parallel to the base of a cone divides the cone into two pieces, and removes the top part. The radius of the cone is 6 inches (in), the height of the cone is 16 in, and the distance from the base to the parallel plane is 8 in. What is the volume of the remaining bottom part, in cubic inches?

A) 56π

B) 84π

C) 126π

D) 168π

4

If the circumference of the base part of cone is 10 centimeters (cm) and the height of the cone is 8 cm, what is the volume of the cone, to the nearest cubic centimeter?

A) 18

B) 21

C) 24

D) 32