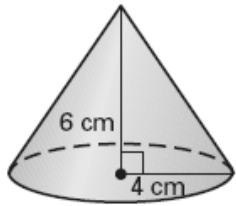**1.** Compare the volume of a cone to that of a cylinder with the same base and height as the cone.

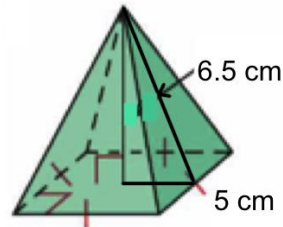**Find the volume of the solid. Round your answer to the hundredths, if necessary.**
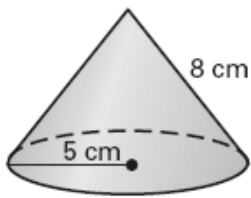
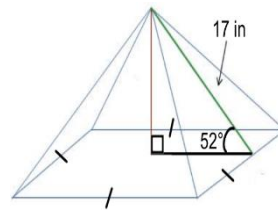**2.**

Base is_____

B_A =_____

h = _____

V = _____

6 cm

4 cm

3.

6.5 cm

5 cm

Base is_____

B_A =_____

h = _____

V = _____

4.

8 cm

5 cm

Base is_____

B_A =_____

h = _____

V = _____

5.

17 in

52°

Base is_____

B_A =_____

h = _____

V = _____

6.

13 m

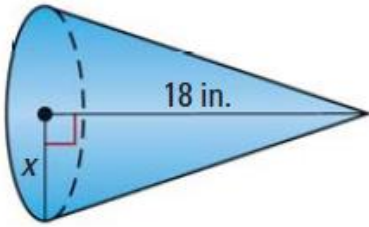32°

Base is_____

B_A =_____

h = _____

V = _____

7.

17 ft

12 ft
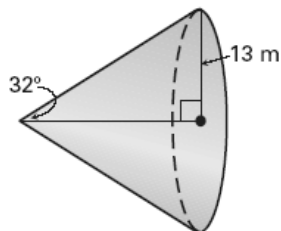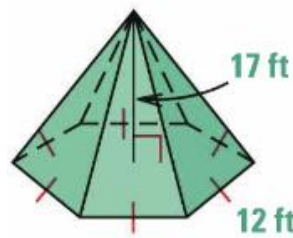
Base is_____

B_A =_____

h = _____

V = _____

8. ★ **MULTIPLE CHOICE** The volume of a pyramid is 45 cubic feet and the height is 9 feet. What is the area of the base?
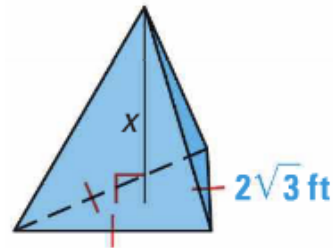
  Ⓐ 3.87 ft^2 Ⓑ 5 ft^2 Ⓒ 10 ft^2 Ⓓ 15 ft^2

Solve for x.

9.

Volume $= 216\pi \text{ in.}^3$

18 in.

x

10. Volume $= 7\sqrt{3} \ ft^3$

x

$2\sqrt{3}$ ft

11. ERROR ANALYSIS: Directions: *Describe* and correct the error in finding the value of the cone

$V = \frac{1}{3}\pi(9^2)(15)$

$= 405\pi$

$\approx 1272 \text{ ft}^3$

15 ft

9 ft

Answer Key: 1) The volume of the cone is 1/3 the volume of the cylinder   2) $32\pi \approx 100.53cm^3$ 3) $50cm^3$
4) $\approx 163.49cm^3$ 5) $\approx 1956.6in^3$ 6) $\approx 3681.88m^3$ 7) $1224\sqrt{3} \approx 2120.03 \ ft^3$ 8) $D: 15ft$ 9) $x = 6$
10) $x = 7$ 11) Slant height is used, not height. $V = 324\pi \approx 1017.88 ft^3$