

Chapter 9A/10A Extra Credit

*Work is to be done on a separate piece of paper.

Section 1: (2 points)

Find the volume of each cylinder.

- | | | |
|--|---|---|
| 1. $r = 5 \text{ cm}$
$h = 10 \text{ cm}$ | 2. $r = 7.5 \text{ in.}$
$h = 8.1 \text{ in.}$ | 3. diameter = 10 cm
$h = 5 \text{ cm}$ |
| 4. base area = 50 cm^2
$h = 4 \text{ cm}$ | 5. $r = 17 \text{ cm}$
$h = 10 \text{ cm}$ | 6. $d = 29 \text{ cm}$
$h = 13 \text{ cm}$ |

Section 2: (2 points)

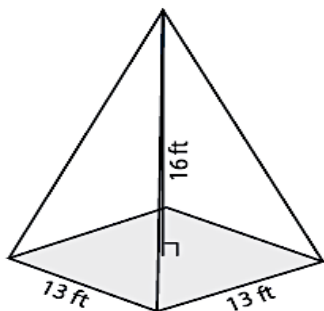
Find the volume of each cone.

- | | | |
|--|--|--|
| 1. $r = 4 \text{ cm}$
$h = 10 \text{ cm}$ | 2. $r = 2.5 \text{ in.}$
$h = 10.4 \text{ in.}$ | 3. $d = 12 \text{ in.}$
$h = 6 \text{ in.}$ |
| 4. $d = 9 \text{ cm}$
$h = 10 \text{ cm}$ | 5. $r = 6\frac{1}{3} \text{ ft}$
$h = 12\frac{1}{2} \text{ ft}$ | 6. $r = 3\frac{1}{4} \text{ ft}$
$h = 6 \text{ ft}$ |

Section 3: (1 point)

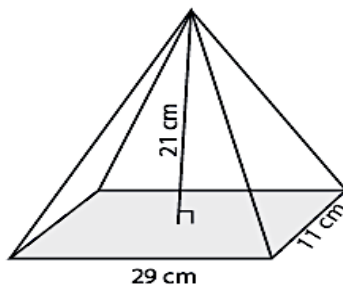
Find the volume of each rectangular pyramid. Round the answer to two decimal places.

1)



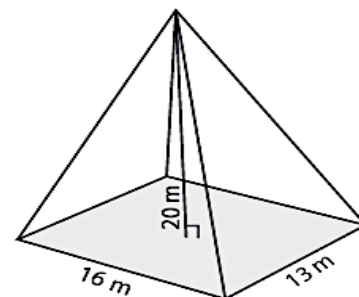
Volume = _____

2)



Volume = _____

3)



Volume = _____

Section 4: (1 point)

Use the given information to find the exact and approximate volume of the sphere.

1. radius = 10 cm 2. radius = 4 ft 3. diameter = 10 cm

Section 5: (2 points)

$$\sqrt[3]{1728} = \quad \sqrt[3]{343} = \quad \sqrt{64} \quad \sqrt{81}$$

$$\sqrt[3]{64} = \quad \sqrt[3]{1000} = \quad \sqrt{169} \quad \sqrt{144}$$

$$\sqrt[3]{512} = \quad \sqrt[3]{2744} = \quad \sqrt{289} \quad \sqrt{256}$$