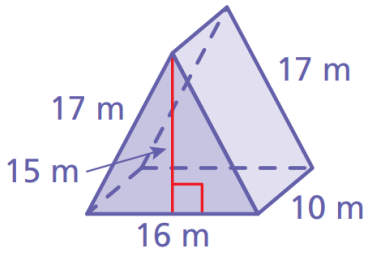
Geometry
Ch. 11 HW #8

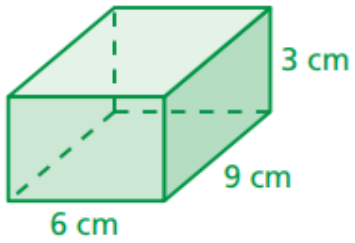
Name: _____
Period: _____

Use separate paper. Find the surface area and volume.

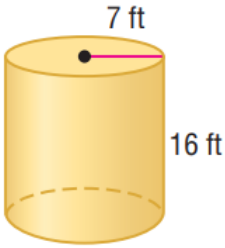
1)



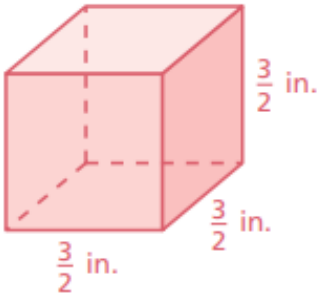
2)



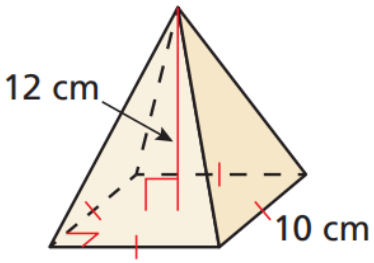
3)



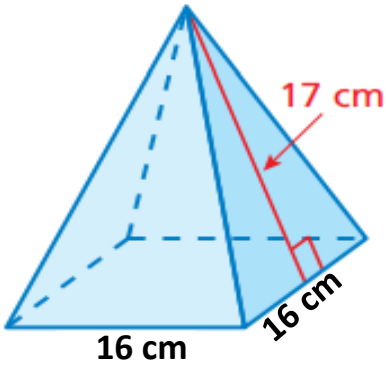
4)



5) Note: You will need the Pythagorean theorem to find the slant height.

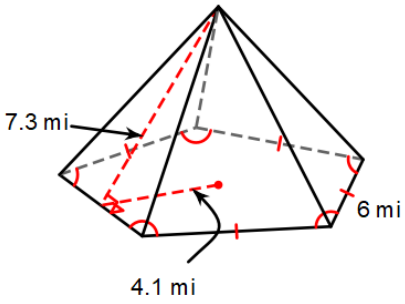


6) Note: You will need the Pythagorean theorem to find the height.

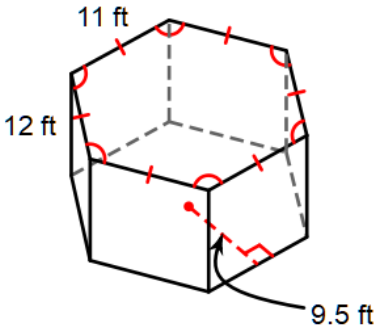


Find the **surface area** of each of the following. You **don't** need to find the volume.

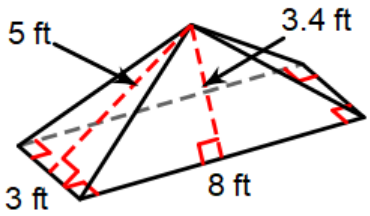
7)



8)



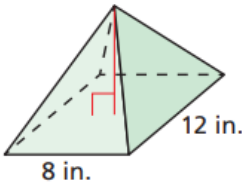
9) Optional Challenge:



Optional Challenge: Find the indicated value.

10) Find the height.

Volume = 224 in.^{3}



11) The volume of a cylinder is 972π cm^3. If the radius is 9 cm, find the height.

Hint: $V = BH$
$V = \pi r^2 H$

12) The surface area of a cylinder is 130π cm^2. If the radius is 5 cm, find the height.

Hint:
$Surface\ Area = 2\pi r^2 + 2\pi rH$

Answers: Surface Areas: 13.5, 66.2, 171, 198, 360, 740, 800, 322π, 1419
Volumes: 3.375, 162, 400, 784π, 1200, 1280
Other: 7, 8, 12