**Answers for Filling and Wrapping Review Sheet**

1. Area of circle = πr2Area = π(4.52)

**Area = 20.25 π in2**

1. C = πd

C = 314

314 = πd

**d = 100 ft**

 3a. Surface area means area of all the faces combined. If one face is 49 cm2 and a
 cube has 6 faces, then the surface area is 49 x 6 = **294 cm2**

 3b. V = Ph + 2B

 If the Area of one side of a cube is 49, then the length of each side (length,
 width, and height) is 7 because cubes are made of squares and squares have
 equal sides.

 V = 28 x 7 + 2(49)

 **V = 343 cm3**

1. The box is a cube. If the volume is 512, that means that each side is the same. 8 \* 8 \* 8 = 512, so each side is 8.

SA = Ph + 2B P = 32 h = 8 B = 64
SA = 32 x 8 + 2x 64
**SA = 384 units2**
2. a. C = πd SA = πdh + 2 π(r2)
C = 24 SA = 7.64 x 10 π +2 π(3.822)
 SA = 76.4 π + 29.18 π
24 = πd **SA = 105.58 π cm2**
d = 7.64
r = ½ d
r = 3.82

5b. V = πr2h

 V = π(3.822)10 = **146 π cm3**

1. r = 3; h = 7 r = 6; h = 14
a. V = (1/3) π(r2)h b. V = (1/3) (62)\*14 π
 V = (1/3) π(32)7 = 21 π cm3 V = 168 π cm3

168 π divided by 21 π = 8, so the second cone is **8 times bigger**
2. Area of a circle = πr2
	1. r = 8; h = 12
	A = π(82) = **64 π ft2**
	2. V = (1/3) πr2h

V = (1/3) π(82)12 = 256 ft3

1. d = 12, so r = 6

V = (4/3) πr3

V = (4/3) π63 = 288 π m3