Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the problem. Use $\pi = 3.14$ when necessary.

1) A spherical container has a 9 dm diameter. What is its volume? 1) _____

A) 3052.1 dm^3 B) 214.6 dm^3 C) 84.8 dm^3 D) 381.5 dm^3

2) A giant cube-shaped die measures 17 cm on a side. Find the volume of the die. 2) _____

A) 4913 cm^3 B) 51 cm^3 C) 1734 cm^3 D) 289 cm^3

3) How many dm^3 can an aquarium hold if it has dimensions of 5 dm x 5 dm x 4 dm? 3) _____

A) 80.0 dm^3 B) 125.0 dm^3 C) 100.0 dm^3 D) 100.0 dm^3

4) A certain marine engine has cylinders that are 3.34 cm in diameter and 4.12 cm deep. Find the total volume of 8 cylinders. 4) _____

A) 577.3 cm^3 B) 691.3 cm^3 C) 288.6 cm^3 D) 36.1 cm^3

5) A spherical container has a 170 cm diameter. What is its volume? Round to the nearest cm^3. 5) _____

A) 30,249 cm^3 B) 20,569,093 cm^3 C) 1,446,264 cm^3 D) 2,571,137 cm^3

6) Three people build a rectangular building 8 m wide, 6 m long, and 7 m high. How many cubic meters does the shed contain? 6) _____

A) 21 m^3 B) 146 m^3 C) 336 m^3 D) 2688 m^3

Solve the problem.

7) Rosie can crochet a 5 cm by 45 cm strip in 2 hours. If there is a 1453 cm^2 area completed when she starts and she crochets for 5 hours, how much total area will Rosie have finished? 7) _____

A) 2578 cm^2 B) 2015.5 cm^2 C) 562.5 cm^2 D) 1678 cm^2

8) A field is 190 meters long and 140 meters wide. If 1 m^2 equals 0.0001 ha, what is the area of the field in hectares? 8) _____

A) 2.66 hectares
B) 26,600,000 hectares
C) 266,000,000 hectares
D) 26.6 hectares

9) Emma's rubik cube has 150 cm^2 of area. Each side of Sophie's cube is twice as wide as Emma's. Find the area of Sophie's cube. 9) _____

A) 300 cm^2 B) 100 cm^2 C) 50 cm^2 D) 600 cm^2

10) Joe planted a circular plant garden in his backyard. Find the area of his garden if the radius is 5.9 meters. Use the formula $A = \pi r^2$. 10) _____

A) 343.56 m^2 B) 109.36 m^2 C) 37.07 m^2 D) 18.54 m^2

11) How much will it cost to carpet a rectangular room measuring 14 m by 20 m, if carpeting costs $18.35 per square meter? 11) _____

A) $1247.80 B) $10,276.00 C) $623.90 D) $5138.00

Fill in the missing value.

12) 1 cm^2 = _____ dm^2 12) _____

A) 100 B) 0.01 C) 0.1 D) 10

13) 11 hm^3 = _____ km^3 13) _____

A) 11,000 B) 1100 C) 0.11 D) 0.011

14) 4.7 L = _____ cm^3 14) _____

A) 4700 B) 0.047 C) 0.0047 D) 470

15) 0.024 m^2 = _____ mm^2 15) _____

A) 2400 B) 240 C) 24 D) 24,000

(1) $(4/3) * 3.14 * (9/2)^3 = 381.5\ dm^3$

(2) $4913\ cm^3$

(3) $100\ dm^3$

(5) $(4/3) * 3.14 * (170/2)^3 = 2,571,137\ cm^3$

(4) $288.6\ cm^3$

(6) $336\ m^3$

(7) $(5 * 45)/2 = 112.5\ cm^2/HR$

$1453 + (5 * 112.5) = 2015\ cm^2$

(9) $\sqrt{150} = 12.25$

$(2 * 12.25) * (2 * 12.25) = 600\ cm^2$

(10) $109.30\ m^2$

(11) $\$5138.00$

(8) $2.66\ ha$

(12) $00001.0000 = 0.01\ dm^2$

(AREA 2 * 1 PLACE)

(13) $00011.0000 = 0.011\ Km^3$

(VOL 3 * 1 PLACE)

(14) $4.7\ L = 4.7\ dm$

$4.70000 = 4700\ cm^3$

(VOL 3 * 1 PLACE)

(15) $0000.02400000 = 24,000\ m^2$

(AREA 2 * 3 PLACE)