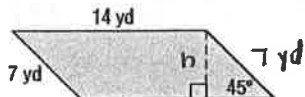


Geometry

Area and Volume Review Worksheet

Find the area of each two-dimensional figure. Round your answers to the nearest tenth.

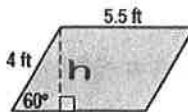
1.  $A = 14(4.9) = 68.6 \text{ yd}^2$



$\sin 45 = \frac{h}{7}$

$h = 4.9$

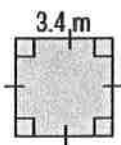
5.  $A = (5.5)(3.5) = 19.3 \text{ ft}^2$



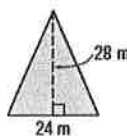
$\sin 60 = \frac{h}{4}$

$h = 3.5$

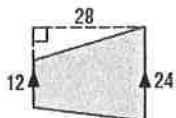
2.  $A = 3.4^2 = 11.6 \text{ m}^2$



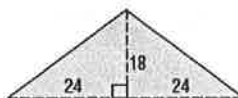
6.  $A = .5(24)(28) = 336 \text{ m}^2$



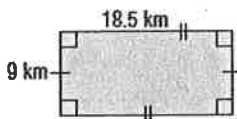
3.  $A = .5(28)(12+24) = 504$



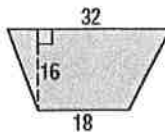
7.  $A = .5(48)(18) = 432$



4.  $A = (18.5)(9) = 166.5 \text{ km}^2$

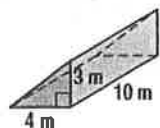


8.  $A = .5(16)(32+18) = 400$



Find the volume of each three-dimensional figure. Round your answers to the nearest tenth.

9.  $V =$

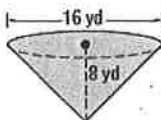


$B = .5(4)(3) = 6$

$h = 10$

$V = 6 \cdot 10 = 60 \text{ m}^3$

11.

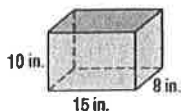


$r = 8$

$h = 8$

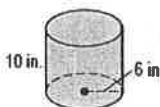
$V = \frac{1}{3} \pi (8^2)(8) = 536.2 \text{ yd}^3$

10.



$V = 10 \cdot 15 \cdot 8 = 1200 \text{ in}^3$

12.

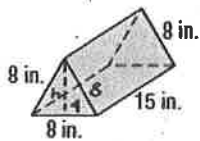


$V = \pi (6^2)(10) = 1131.0 \text{ in}^3$

Geometry

Area and Volume Review Worksheet

13.



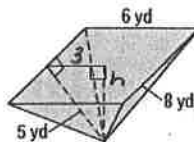
$$8^2 - 4^2 = h^2$$

$$h = 6.9$$

$$B = 27.6$$

$$V = 27.6 \cdot 15 = 414 \text{ in}^3$$

19.

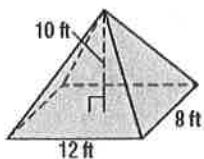


$$h = 4$$

$$B = 6 \cdot 8 = 48$$

$$V = \frac{1}{3}(48)(4) = 64 \text{ yd}^3$$

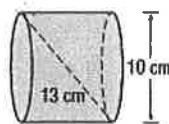
14.



$$B = 12 \cdot 8 = 96$$

$$V = \frac{1}{3}(96)(10) = 320 \text{ ft}^3$$

20.

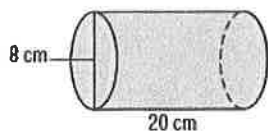


$$r = 5$$

$$h = \sqrt{13^2 - 10^2} = 8.3$$

$$V = \pi(5^2)(8.3) = 651.9 \text{ cm}^3$$

15.



$$r = 4$$

$$h = 20$$

$$V = \pi(4^2)(20)$$

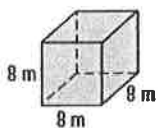
$$= 1005.3 \text{ cm}^3$$

21.



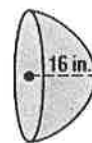
$$V = \frac{4}{3} \pi(8^3) = 2681.6 \text{ cm}^3$$

16.



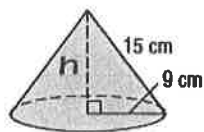
$$V = 8^3 = 512 \text{ m}^3$$

22.



$$V = \frac{2}{3} \pi(16^3) = 8578.6 \text{ in}^3$$

17.

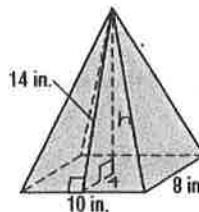


$$h = \sqrt{15^2 - 9^2} = 12$$

$$V = \frac{1}{3} \pi(9^2)(12)$$

$$= 1017.9 \text{ cm}^3$$

23.



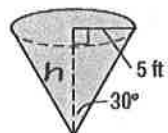
$$h = \sqrt{14^2 - 4^2} = 13.4$$

$$B = 10 \cdot 8 = 80$$

$$V = \frac{1}{3}(80)(13.4)$$

$$= 357.3 \text{ in}^3$$

18.



$$\tan 30 = \frac{5}{h}$$

$$h = 8.7$$

$$V = \frac{1}{3} \pi(5^2)(8.7)$$

$$= 227.8 \text{ ft}^3$$