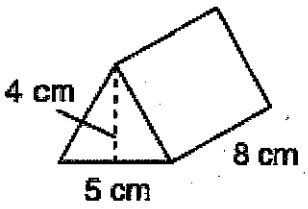
Name: Key Date: Hour:

Practice quiz on volume and surface area. You may use a calculator but be sure to SHOW ALL OF YOUR WORK! HONORS

Find the **VOLUME** of each figure.

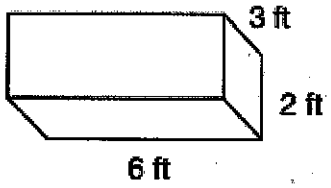
1.



$80\ cm^3$

$4.5 \div 2.8$

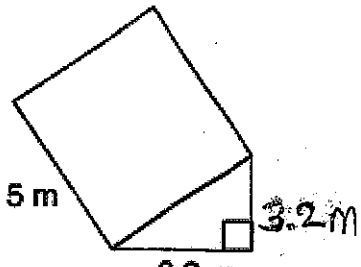
2.



$36\ ft^3$

$6 \cdot 3.2 = 36$

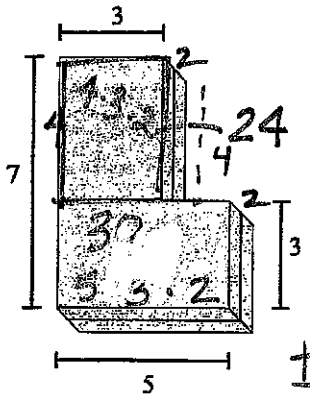
3.



$25.6\ m^3$

$3.2 \cdot 3.2 \div 2.5$

4.



$1 \cdot 3 \cdot 2 = 24$

$3 \cdot 2 = 6$

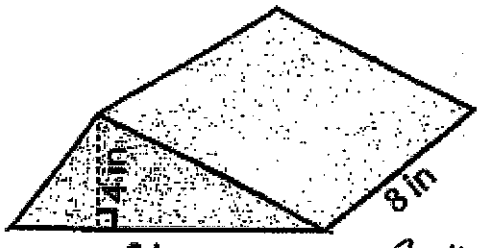
$24 + 6 = 30$

$5 \cdot 3 \cdot 2 = 30$

$30 + 24$

54 units^3

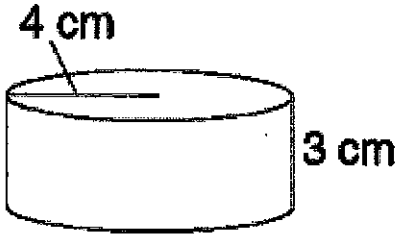
5.



$9.4 \div 2.8$

144 in^3

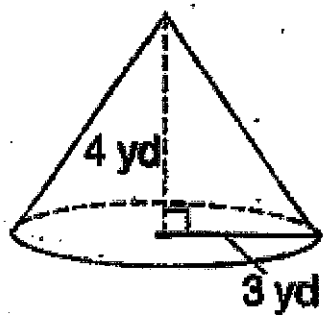
6.



$4^2 \cdot 3.14 \cdot 3$

150.72 cm^3

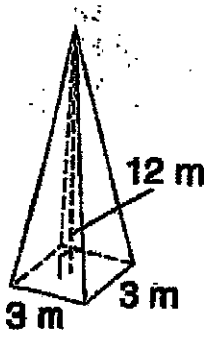
7.



$3^2 \cdot 3.14 \cdot 4 \div 3$

37.68 yd^3

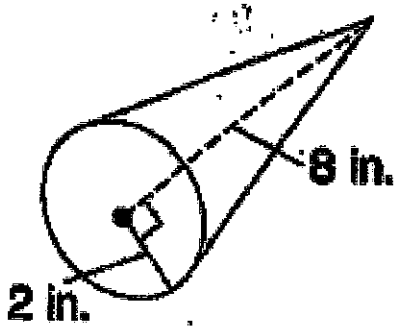
8.



$36\ m^3$

$3 \cdot 3 \cdot 12 \div 3$

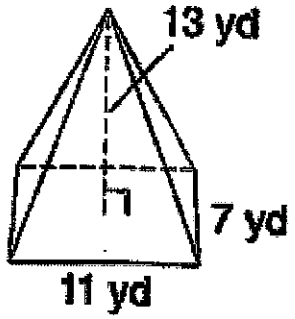
9.



$33.49\ in^3$

$2^2 \cdot 3.14 \cdot 8 \div 3$

10.

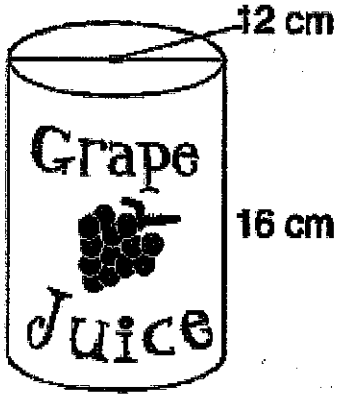


$333.7\ yd^3$

$11 \cdot 7 \cdot 13 \div 3$

11.

A juice can is shaped like a cylinder. It is 12 centimeters wide and 16 centimeters tall. Find its volume to the nearest whole number. Use 3.14 for π.

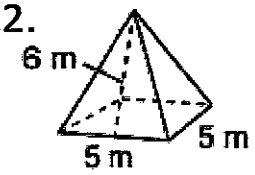


$1,808.64\ cm^3$

$6^2 \cdot 3.14 \cdot 16$

Find the **SURFACE AREA** of the following figures.

12.

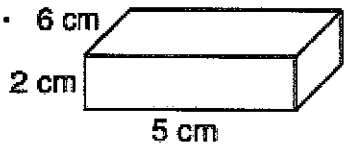


Base: $5 \cdot 5$ = 25

Sides: $6 \cdot 5 \div 2 = 15$ x4 = 60

Total Surface area = $85\ m^2$

13.



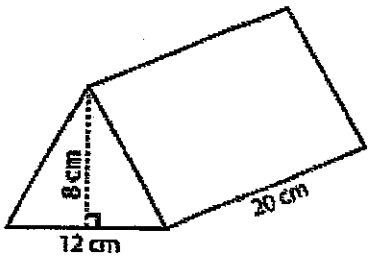
Front: $2 \cdot 5 = 10$ x2 = 20

Top: $5 \cdot 6 = 30$ x2 = 60

Side: $2 \cdot 6 = 12$ x2 = 24

Total Surface Area = $104\ cm^2$

1.

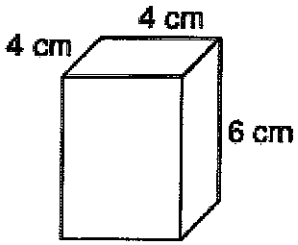


Base: $12 \cdot 8 \div 2 = 48$ x2 = 96

Side: $12 \cdot 20 = 240$ x3 = 720

Total Surface Area = $816\ cm^2$

15.



Front: $6 \cdot 4 = 24$ x2 = 48

Top: $4 \cdot 4 = 16$ x2 = 32

Side: $6 \cdot 4 = 24$ x2 = 48

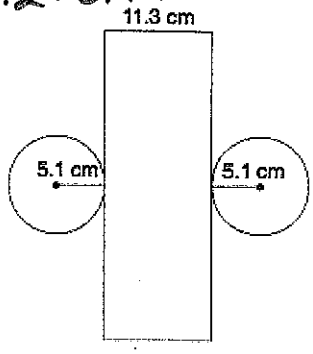
Total Surface Area = $128\ cm^2$

16. Rectangle: $11.3 \cdot 32.028 = 361.9$

Circle: $5.1^2 \cdot 3.14$ x2 = 163.3

Total Area: $525.2\ cm^2$

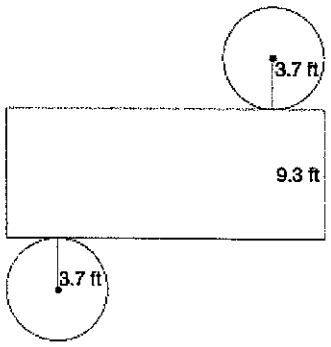
$C = 10.2 \cdot 3.14$



17. Rectangle: $23.236 \cdot 9.3 = 216.0948$

Circle: $3.7^2 \cdot 3.14$ x2 = 85.9732

Total Area: $302.1\ ft^2$



$7.4 \cdot 3.14$