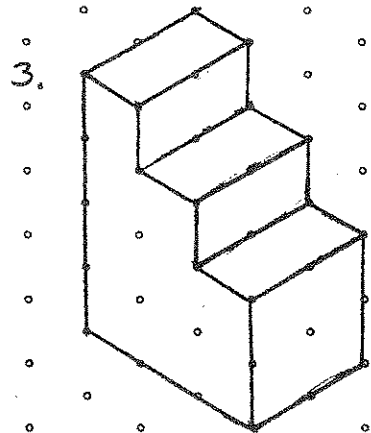
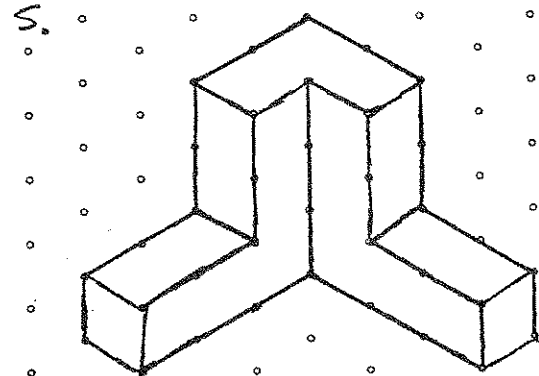
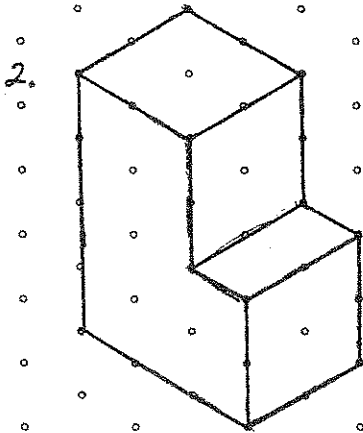
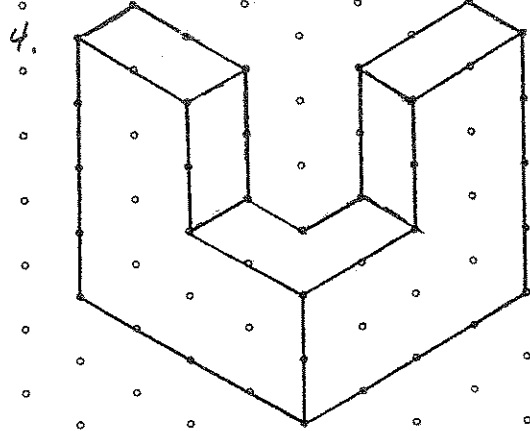
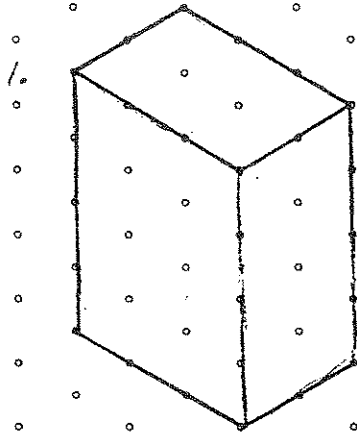


FIND THE VOLUME



1. $V = 13$

2. $V = 22$

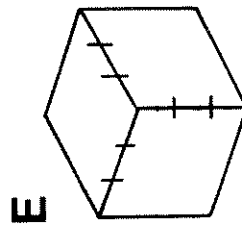
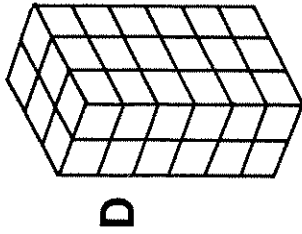
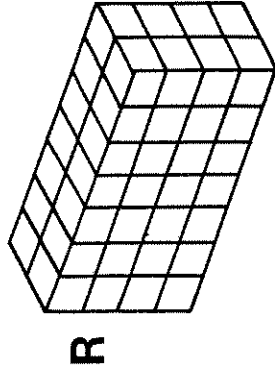
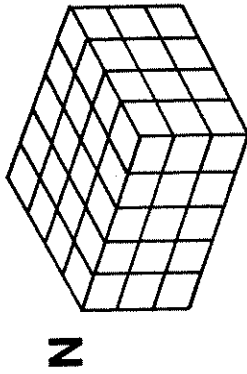
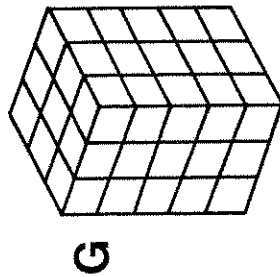
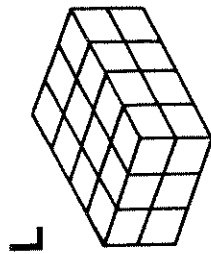
3. $V = 18$

4. $V = 20$

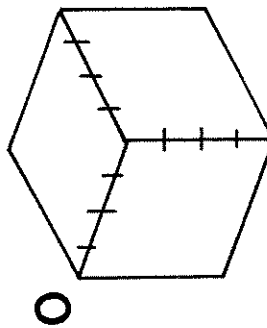
5. $V = 24$

What Problem Does A Five-Foot Man Have?

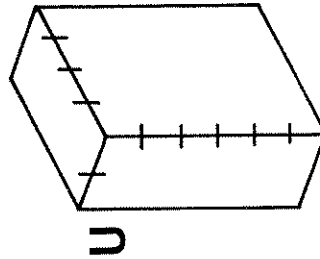
TO ANSWER THIS QUESTION: Figure out the volume of any rectangular solid below and find your answer in the code. Each time it appears in the code, write the letter of that exercise above it. Keep working and you will discover the answer to the question.



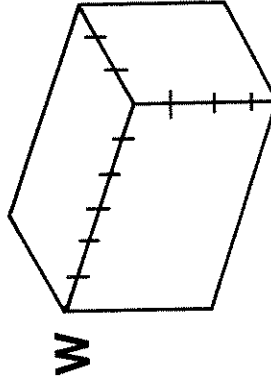
(I) LENGTH: 9
WIDTH: 7
HEIGHT: 10



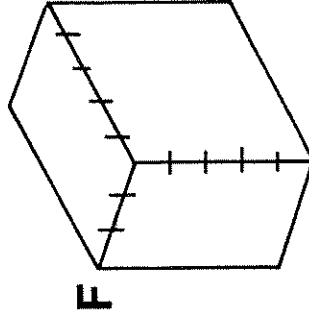
(B) LENGTH: 15
WIDTH: 4
HEIGHT: 8



(Y) LENGTH: 12
WIDTH: 12
HEIGHT: 5



(H) LENGTH: 16
WIDTH: 11
HEIGHT: 15



(T) LENGTH: 18
WIDTH: 6
HEIGHT: 25

(A) LENGTH: 14
WIDTH: 8
HEIGHT: 3

(P) LENGTH: 30
WIDTH: 20
HEIGHT: $\frac{1}{2}$

(S) LENGTH: 17
WIDTH: $\frac{1}{2}$
HEIGHT: 40

CODED
ANSWER

480 48 720 630 60 45 2700 72 64 336 60 36 336 2640 336 24 75
300 336 630 56 340 64 75 340 2640 64 27 340

GEOMETRIC FORMULAS

| 2D – SHAPE | PERIMETER | AREA |
|--|-----------------------------|-------------------------------|
| Square (side length = s) | $P = 4s$ | $A = s^2$ |
| Rectangle (base = b, height = h) | $P = 2b + 2h$ | $A = bh$ |
| Parallelogram (base = b, height = h) | | $A = bh$ |
| Triangle (base = b, height = h) | | $A = \frac{1}{2}bh$ |
| Trapezoid (base 1 = b_1 , base 2 = b_2 , height = h) | | $A = \frac{1}{2}(b_1 + b_2)h$ |
| Circle | $C = 2\pi r$ $C = \pi d$ | $A = \pi r^2$ |

| 3D – SHAPE | SURFACE AREA | VOLUME |
|--|---------------------------|---|
| Prism (B= area of base, h= height, P=perimeter of base) | $SA = Ph + 2B$ | $V = Bh$ |
| Cylinder (B= area of base, h= height, r = radius of base) | $SA = 2\pi rh + 2\pi r^2$ | $V = Bh$ $V = \pi r^2 h$ |
| Pyramid (B= area of base, h= height) | | $V = \frac{1}{3}Bh$ |
| Cone (B= area of base, h= height, r = radius of base, s = slant height of cone) | $SA = \pi r(r + s)$ | $V = \frac{1}{3}Bh$ $V = \frac{1}{3}\pi r^2 h$ |
| Sphere (r = radius of sphere) | $SA = 4\pi r^2$ | $V = \frac{4}{3}\pi r^3$ |

MATH 106 – PROJECT 3

CREATE A GAME RELATED TO MATHEMATICS

Assignment: Create a board game or other type game (bingo, card, dice, etc.) that has a mathematical topic as the basis. It must be appropriate to the elementary school level and focus on one major aspect of math (from either semester), like fractions, geometry, etc. Basing your game on an existing game (you can create your own game board or even use their game board if desired for this activity) is an easy way to create a game once you come up with your topic.

The game must be easy to play (try it with friends or kids first!!). You must have written directions for your game and enough materials to play the game with a group of 4 class members. For full credit, your game & board must be well designed and you must have shown sincere effort to make an authentic educational game.

DUE: