

# MATH SUPERSTARS – 5

Saturn, XI

Name: \_\_\_\_\_

(This shows my own thinking.)

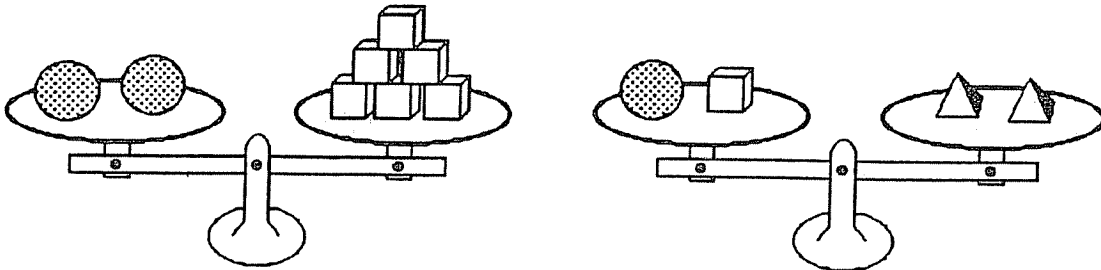
- ★★★★ 1. Jacqueline, Kanisha, Howard, and Billy have jobs in their group. The jobs are Recorder, Materials Manager, Time Keeper, and Reporter. Kanisha sits across from the Recorder and next to the Materials Manager. Billy hurt his hand and cannot record the work done. Jacqueline is best friends with the Reporter, and lives down the street from the Recorder. Billy rides the bus with both the Materials Manager and the Reporter. What is the task of each student?

\_\_\_\_\_ Recorder      \_\_\_\_\_ Materials Manager  
\_\_\_\_\_ Time Keeper      \_\_\_\_\_ Reporter

- ★★ 2. A sheet of plywood measures 4 feet by 8 feet. Armand wants to build a dog house using one whole sheet of plywood for the floor.
- a. Armand needs to put a “2 by 4” under the outer edge all the way around the floor, and another “2 by 4” that runs down the middle lengthwise, to give support to the plywood. If “2 by 4’s” are sold in 8-foot lengths, how many should he buy? \_\_\_\_\_
- b. If he carpets the floor also, how many square feet of carpet should he buy? \_\_\_\_\_
- ★★ 3. Pine Elementary School Chorus needs tapes to record their musical for the members. Tapes cost \$7.95 for a package of 2 tapes and \$11.75 for a package of 3 tapes. If 23 members want copies of the tape, what is the least amount they will have to spend?

Answer: \_\_\_\_\_

- ★★★ 4. If each sphere has a mass of 120 gms, what is the mass of a pyramid? \_\_\_\_\_ gms

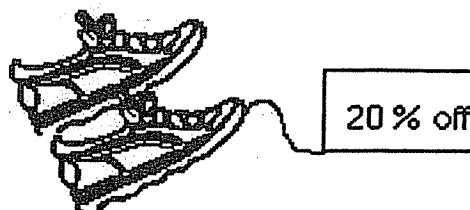


- ★★ 5. Sunny Ridge Elementary School was collecting cans for a food drive. The first two days of the drive, they collected 103 cans. They collected 5 cans more on the first day than on the second day. How many cans did they collect each day?

Answer : \_\_\_\_\_ 1st day                      \_\_\_\_\_ 2nd day

- ★★ 6. Josie found a pair of shoes she wanted priced at \$55, but she did not want to pay that much. A few weeks later, the same shoes were marked down 20%. Including the 6% sales tax, how much will she pay if she buys the shoes on sale?

Answer: \_\_\_\_\_



- ★★ 7. People who learn to multiply mentally usually do the opposite of what they do with paper-and-pencil. They start multiplying the "big numbers" first, and then add on the product of the smaller numbers. Watch James below:



To multiply  $63 \times 45$ , first multiply  $60 \times 40$  to get 2400. Then add on  $60 \times 5$  or 300, and you have 2700. Then add on  $3 \times 40$  or 120, and you're up to 2820. Next add  $3 \times 5$  or 15, and you have 2835. So  $63 \times 45$  is 2835.

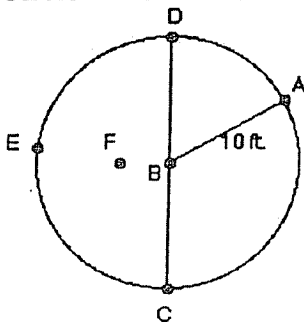
Practice multiplying this way with 2-digit by 2-digit multiplication problems that you make up.

Then mentally multiply and write the answer to this problem:

$21 \times 35$

Answer \_\_\_\_\_

- ★★★ 8. Circle the best answer for the length of each line segment.



$\overline{FE}$     12 ft.    10 ft.    8 ft.

$\overline{CD}$     15 ft.    30 ft.    20 ft.

$\overline{BF}$     5 ft.    4 ft.    1 ft.