

# SUNSHINE MATH - 7

## Neptune, XI

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

(This shows my own thinking.)

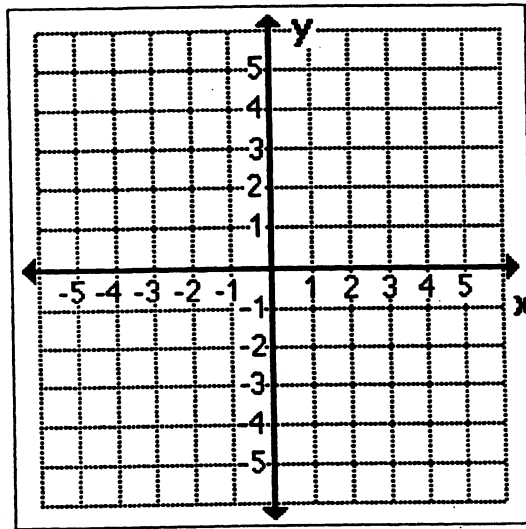
- ★★ 1. If a train has 1 engine and 3 other cars, and the engine must always be in front, how many different ways can the 4 cars in the train be arranged?



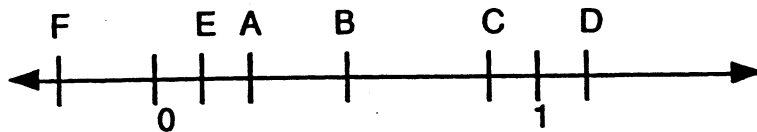
Answer: \_\_\_\_\_

- ★ 2. Plot these points on the grid below and connect them in order. You should get a familiar picture.

- |           |            |            |           |
|-----------|------------|------------|-----------|
| a. (-3,0) | b. (-1,-1) | c. (-2,-4) | d. (0,-2) |
| e. (2,-4) | f. (1,-1)  | g. (3,0)   | h. (1,0)  |
| i. (0,3)  | j. (-1,0)  | k. (-3,0)  |           |



- ★★★★ 3. If point A is multiplied by point B the answer will be point \_\_\_\_\_.



- ★★★ 4. Mike's birthday was 100 days ago. Today is Wednesday. On what day of the week did his birthday fall?

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

- ★★★★ 5. David signed a contract that says he must build 10 dog houses for the S.P.C.A. The organization wants them ready within one month. For every dog house David completes he will receive \$40 and for every one he fails to complete he will be fined \$10. At the end of the month David received \$150. How many dog houses did he build?

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

- ★★★ 6. Mary starts a project at the library at 9:00 A.M. She estimates that her work will take her about 4 hours. She plans to take a 15 minute break and a 30 minute lunch. Her walk home is about 20 minutes. About what time would she expect to return home?

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

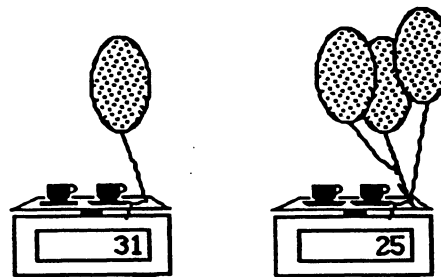
- ★★ 7. In 1977, Florida started keeping records on the number of manatees that died each year. The results through 1980 are shown below. What is the average number of manatees that died per year from 1977 to 1980? Round your answer to the nearest whole number.

<u>YEAR</u>	<u>NUMBER DEAD</u>
1977	112
1978	88
1979	80
1980	65

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

- ★★★★ 8. The scale shows weight in grams. How much does each cup of coffee weigh? Remember that a balloon can have negative weight, if filled with helium.

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



- ★★★ 9. Write an equation for the situation below. Solve the equation by finding the value for  $t$ .

Answer: An equation is: \_\_\_\_\_. The solution is  $t =$  \_\_\_\_\_

