

DAY 6

Agriculture, Food, & Natural Resources Math Skills

Directions: Complete the following word problems. Remember to show your work (2 points), have the correct answer (2 points), and write your answer in a complete sentence (1 point).

You have worked as a guide at the aquarium for two summers. This summer you have been offered the job again, but with a 4 percent raise. Last summer you worked two and a half months and earned a total of \$1,875. How much more will you earn per month this summer than you did the last two summers? What will your earnings be for the entire summer?

Wally was a farmer who raised crops. Last year he planted 3 acres of soybeans. He paid \$100 for the seed and \$200 for fertilizer. A part-time worker helped him plant and harvest. The man's labor cost a total of \$500. The crop yielded 700 bushels of soybeans, and Wally sold them for \$2.03 a bushel. How much did Wally profit on his soybeans last year?

Mei Chen raised rabbits for sale. In April she owned thirty-six rabbits. In May, after all the litters of baby rabbits were born, the rabbits numbered fifty-seven. She sold half the adult rabbits and gave her brother one-third of the babies to start his own business. How many did she have remaining?

Geraldo owns a fish farm. Last year he sold \$730,895 worth of fish. The cost of the fish to him was \$562,362. His selling expenses were \$57,916. General expenses were \$37,246. His taxes came to \$16,578. What profit did he make?

DAY 7

Architecture & Construction Math Skills

Directions: Complete the following word problems. Remember to show your work (2 points), have the correct answer (2 points), and write your answer in a complete sentence (1 point).

Scott was a carpenter. He cut the following wood for a house. How much wood (in length) did he cut altogether?

\$ 16 pieces 8 feet long

\$ 17 pieces 7 feet 4 inches long

\$ 12 pieces 4 feet 6 inches long

\$ 2 pieces 2 feet 9 inches long

\$ 13 pieces 6 $\frac{3}{4}$ inches long

\$ 1 piece 9 feet 3 inches long

Plywood is sold by the square foot. At \$1.23 per square foot, how much would the following sizes cost?

\$ 1 X 3 feet

\$ 12 X 12 inches

\$ 4 X 8 feet

\$ 52 X 6 feet

As an architect, you recently designed a building with the dominions of $45' \times 55'$. What is the total square footage of the building? If it costs \$80 per square foot to build the structure, what will be the total cost of the building?

It takes a carpenter $3 \frac{1}{4}$ hours to build a cabinet. How many completed cabinets can the carpenter build in 18 hours?

- a. 3
- b. 4
- c. 5
- d. 6

DAY 8

Arts, Audio-Video Technology, & Communications Math Skills

Directions: Complete the following word problems. Remember to show your work (2 points), have the correct answer (2 points), and write your answer in a complete sentence (1 point).

Nirad took a job to paint a mural for his community's city hall. It was agreed he would do the job for \$5,000. Nirad wanted the mural to be good, so he put in a lot of hours. In October, he worked 40 hours a week for 2 weeks. In November he worked 35 hours the first week, 23 the second, and 55 the third. In December he worked 61 hours the first week and 70 hours the second. If Nirad had been paid by the hour, how much per hour would he have earned?

Tony worked for a museum. He was being sent to Japan to buy art objects and wanted to take \$2,500 with him for travel expenses. A friend advised him to exchange his money for yen (Japanese currency). Tony learned that on that day \$1 was worth 144 yen. How many yen would Tony take with him?

You are the producer of what promises to be the season's biggest blockbuster hit. If it costs \$5,000,000 to produce the movie, and the average ticket price is \$7.00, how many tickets must be sold to break even? If 750,000 tickets were sold every week, how many weeks would it take to profit \$5,000,000?

DAY 9

**Business, Management, & Administration
Math Skills**

Directions: Complete the following word problems. Remember to show your work (2 points), have the correct answer (2 points), and write your answer in a complete sentence (1 point).

You are the secretary of a local business. One of your responsibilities is ordering supplies for the office. You must order supplies for a meeting next month. Forty-five people are expected to attend. How many of the following items must you order to have sufficient supplies for the meeting?

Item Needed	Current Stock	Amount
Pens (10 per box)	23 pens	
Paper Pads (5 per box)	25 pads	
Folders (8 per box)	13 folders	
Name Badges (16 per box)	27 badges	
Binder Clips (12 per box)	11 clips	

Lou can keyboard 59 words a minutes with only 3 mistakes. Tomas keyboards 96 words with only 10 mistakes. Rosemary makes 7 errors and keyboards 43 words a minute. If you subtract 1 word for each mistake they make, how many words can each keyboard in 5 minutes?

A local telephone company charges 5¢ call for local calls. For long distance it charges 13¢ a minute on weekends, 16¢ a minute in the evenings, and 20¢ a minute during weekdays. Ramon made thirteen local calls. He also talked long distance for twenty-four minutes on the weekend, one and one half hours in the evening, and sixteen minutes during a weekday. What was Ramon's total bill?

As department manager, Logan has to keep track of hours and wages. Using the following figures, determine how much his department spent on labor last week:

- Employee 1: 40 hours at \$5.45 and 6 hours at time-and-a-half
- Employee 2: 40 hours at \$6.88 and 10 hours at time-and-a half
- Employee 3: 40 hours at \$7.76 and 2 hours at time-and-a-half
- Employee 4: 40 hours at \$8.12

DAY 10

Education & Training Math Skills

Directions: Complete the following word problems. Remember to show your work (2 points), have the correct answer (2 points), and write your answer in a complete sentence (1 point).

Assume that the average high school teacher has 125 students per year. In a career of 25 years, how many students would the teacher have had? If it costs an average of \$5,531 to educate a student for one year, how much would it cost to educate a student for 13 years?

Each year the principal of Fairfield Bay Community School orders enough book covers for each student to have one. If the current enrollment is 125% of what it was last year, the principal needs to order

- fewer books than last year.
- about the same number of book covers.
- 125 book covers.
- More book covers than last year.

The music teacher is estimating that the attendance at the spring concert will be $\frac{1}{8}$ greater than last year's attendance of 325. Which is the best estimate of the number of people that the music teacher expects to come to the concert?

Each year Coach Bradley orders new softballs for the team. According to her records, 15% of the softballs are lost during the year. If she orders 40 softballs, how many softballs can she expect to lose during the year?

Coach Smith knows the following facts about 5 members of the basketball team.

- Jo is taller than Tia.
- May is shorter than Alicia.
- Alicia is taller than Paula but shorter than Tia.
- May is taller than Paula.

Which of the following lists the players from shortest to tallest?

- Paula, May, Alicia, Tia, Jo
- May, Paula, Alicia, Jo, Tia
- Paula, May, Alicia, Jo, Tia