

Using Charts

Take a look at a problem based on a chart of information.

Information from a magazine questionnaire was placed in the chart at the right. If 1,000 people responded, how many of them pay under \$100 per week for child care?

- a. 10 b. 50 c. 100 d. 150 e. 1,000

What are the steps involved in getting the correct solution? Do you need to just locate information, or do you need to compute as well?

Under \$100	10%
\$100–\$150	52%
\$151–\$250	33%
Over \$250	5%

Once you have found the category for “Under \$100,” read across and find the correct percent. The chart shows that 10% of the people paid under \$100 per week.

10% of 1,000 =

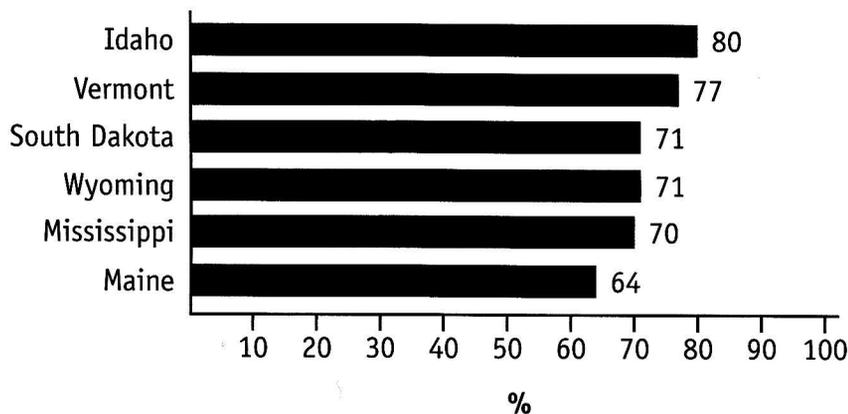
$0.10 \times 1,000 = 100$ (or $\frac{1}{10} \times 1,000 = 100$)

The correct answer is **c. 100**.

Under \$100	10%
\$100–\$150	52%
\$151–\$250	33%
Over \$250	5%

Solve the following problems using the information provided. Problems 1–3 refer to the graph.

Percent of Population Living Outside Metropolitan Areas



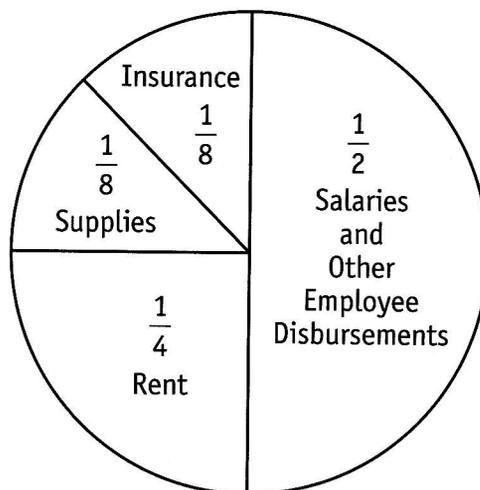
- WN** 1. What percent of the population in Wyoming lives outside the metropolitan areas?
- a. 29 b. 64 c. 70 d. 71 e. 80

- WN** 2. What percent of the population in Idaho lives inside a metropolitan area?
- a. 20 b. 23 c. 24 d. 77 e. 80
- P** 3. The population of Mississippi is approximately 2,600,000. Which expression shows the number of people living outside metropolitan areas in Mississippi?
- a. $70 \times 2,600,000$
 b. $70,000 \times 2,600,000$
 c. $0.70 \times 2,600,000$
 d. $0.70 \div 2,600,000$
 e. $2,600,000 \div 0.70$



Questions 4–6 refer to the graph below.

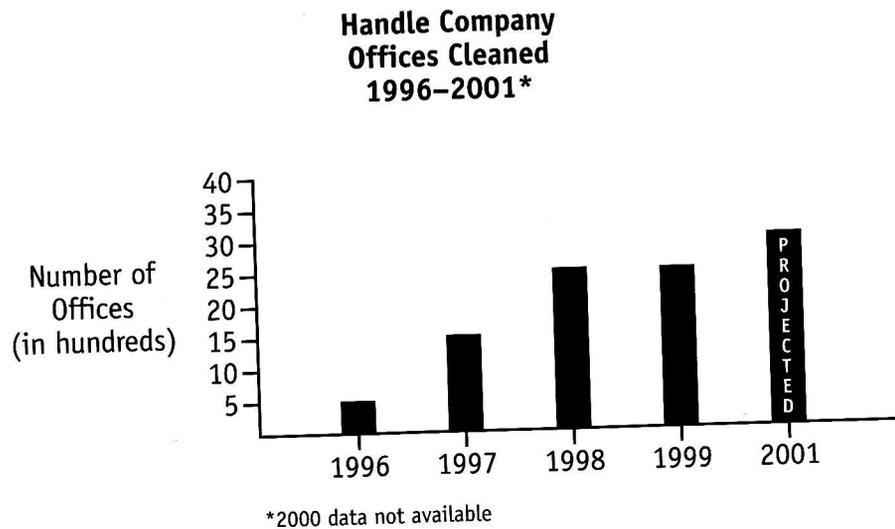
**Comco Corporation
Year 2000 Budget**



- F** 4. What fraction of the budget for Comco Corporation is *not* spent on rent?
- a. $\frac{1}{8}$ b. $\frac{3}{8}$ c. $\frac{1}{2}$ d. $\frac{5}{8}$ e. $\frac{3}{4}$
- F** 5. How many times more money does Comco spend on rent and insurance than it does on supplies?
- a. $\frac{1}{8}$ b. 2 c. 3 d. 4 e. 5
- F** 6. If the entire budget for Comco in 2000 was \$800,000, how much money did the company spend on insurance?
- a. $\frac{1}{8}$ b. \$7,000 c. \$10,000 d. \$100,000 e. \$700,000

Reading Graphs and Charts Carefully

According to the graph, how many offices did the Handle Company clean in 1999?



- a. 5 b. 15 c. 25 d. 2,500 e. 3,500

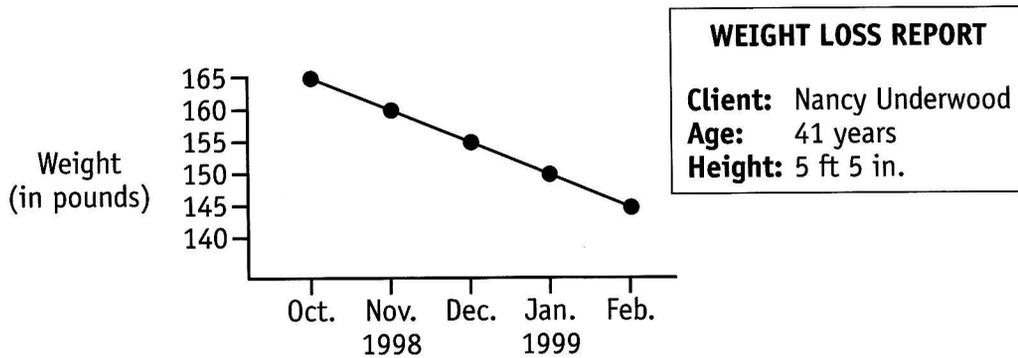
John quickly found the 1999 bar on the graph and read across to the value of 25. He chose **c. 25** as his answer.

What mistake did John make?

When you solve a problem based on a graph, you must be careful to read *all* of the information given. Although John correctly found 25 on the graph, he failed to see the label (*in hundreds*) included on the side of the graph. The correct answer to this problem is **d. 2,500**.
($25 \times 100 = 2,500$)

Try another problem.

According to the graph, how much will Nancy weigh in March of 1999?



- a. 145 b. 140 c. 135 d. 130 e. not enough information given

Pauline looked at the graph and noticed that Nancy was losing weight at a rate of 5 pounds per month. She subtracted 5 pounds from 145 pounds, Nancy's weight in February 1999. She chose **b. 140** as her answer.

What mistake did Pauline make?

Pauline made one major mistake. The graph does not provide *any* information about March of 1999. She cannot assume that Nancy will weigh 5 pounds less in March than in February. (Perhaps Nancy started a different diet and lost 8 pounds instead; or perhaps 145 pounds was her desired weight.) The correct answer to this problem is **e. not enough information given.**

TIP
 When using a graph, use *all* the labels and information provided. However, don't make assumptions or predictions unless you are specifically asked to.