

Making Charts to Solve Item Sets

Gloria and Robert Shaw want to buy a new car that has a list price of \$18,500. Gloria's monthly take-home pay is \$1,800, and Robert's is \$2,400. They would have to make a down payment of \$1,850 (10%) and monthly payments of \$510 for 36 months.

**What makes item sets difficult?
What can simplify them for you?**

Many times there is so much information in an item set that it is easy to get confused. All of the facts and numbers can make it hard to select the information you need to solve each question. Here's a strategy that can help. Look at how you can organize the information from the item set into a chart. Then you can use the chart to select the information you need.

Income	Car Costs
Gloria = \$1,800 per month	• \$18,500 list price
	• \$1,850 down (10%)
Robert = \$2,400 per month	• 36 months of payments at \$510 per month

1. How much do Gloria and Robert have to pay off after they make the down payment?

Information: \$18,500; \$1,850 down

ANSWER: $\$18,500 - \$1,850 = \$16,650$

2. What total price will the Shaws pay for the car?

Information: \$1,850 down; 36 months at \$510 per month

STEP 1 $36 \text{ months} \times \$510 = \$18,360$

STEP 2 $\$1,850 \text{ down} + \$18,360 = \$20,210$

ANSWER: $\$20,210$

3. How much will the Shaws have left per month after they make the car payment?

Information: \$1,800; \$2,400; \$510

STEP 1 $\$1,800 + \$2,400 = \$4,200$

STEP 2 $\$4,200 - \$510 = \$3,690$

ANSWER: \$3,690 per month



Read the item set below and fill in the chart provided. Then answer the questions that follow.

Sasha was comparing two projects she had worked on. The first project took her 100 hours to complete. For this project Sasha required 10 hours of help from a computer operator who earns \$7 per hour. Expenses for materials came to \$124. The second project that Sasha worked on required no outside help, but it took her 20 entire workdays to complete. The materials cost \$280. Sasha earns \$9 per hour, and her workday consists of 9 hours minus 1 hour for lunch.

	First Project	Second Project
Sasha's pay at \$9 per hour		
Computer operator's pay at \$7 per hour		
Cost of materials		

- WN** 1. For materials, how much more did the company have to pay for the second project than the first?
- a. \$404
 - b. \$260
 - c. \$156
 - d. \$150
 - e. not enough information given

- WN** 2. What total dollar amount did the first project cost the company?
- a. \$9
 - b. \$124
 - c. \$700
 - d. \$900
 - e. \$1,094

- WN** 3. What total dollar amount did the second project cost the company?
- a. \$7
 - b. \$1,440
 - c. \$1,720
 - d. \$1,724
 - e. not enough information given



For the item set below, fill in the chart to organize the information. Then answer the questions.

Giant Grocery sells carrots at \$1.19 per pound or \$4.00 for a 5-pound bag. The owner of the store gives a 15% discount on everything *except* vegetables to local restaurants. An Italian restaurant down the street uses about 20 pounds of carrots and 25 pounds of flour each week.

Cost of carrots	
Restaurant purchases	
Discount rates	

- D** 4. If the Italian restaurant bought bags of carrots to last a week, how much money would it save if it bought carrots in 5-pound bags?
- a. \$3.20
 - b. \$7.80
 - c. \$9.31
 - d. \$9.71
 - e. not enough information given

- P** 5. If a nearby restaurant purchased 3 bags of sugar at \$3.60 per bag, how much did it pay?
- a. \$0.39
 - b. \$1.62
 - c. \$9.18
 - d. \$10.80
 - e. not enough information given

- D** 6. How much does the Italian restaurant pay for the flour it uses each week?
- a. \$3.75
 - b. \$7.50
 - c. \$8.25
 - d. \$9.88
 - e. not enough information given

