

## Strategies Toolkit

## Explore



Samrina organized a team to participate in a 325-km bike relay. Half the team members ride 25 km. The rest ride 40 km. Including Samrina, how many people are on Samrina's team?



## Show and Share

Describe the strategy you used to solve the problem. How could you solve the problem a different way?

## Connect

Mr. Biegala bought resource books for \$28 and bookshelves for \$84. He spent \$448 on 12 items. How many of each item did Mr. Biegala buy?



What do you know?

- Resource books cost \$28 each.
- Bookshelves cost \$84 each.
- The total number of books and bookshelves is 12.
- The total cost is \$448.



Think of a strategy to help you solve the problem: You could **make an organized list**.

- Find 2 numbers that add to 448.
- One number must be a multiple of 28, the other must be a multiple of 84.

## Strategies

- Make a table.
- Use a model.
- Draw a diagram.
- Solve a simpler problem.
- Work backward.
- Guess and check.
- Make an organized list.
- Use a pattern.
- Draw a graph.



Find the cost of 1 bookshelf.  
 Find the amount of \$448 that is left.  
 Try to find a number of books whose cost is equal to the amount left.  
 Record the amounts in an organized list.  
 Find the cost of 2 bookshelves.  
 Continue until you find the number of books and the number of bookshelves.

Number of Bookshelves	Cost (\$)	Amount Left (\$)	Number of Books	Cost (\$)
1	84	$448 - 84 = 364$	11	308



Check your work.  
 Is the total number of books and bookshelves 12?  
 Is the total cost of books and bookshelves \$448?

### Practice

Choose one of the

### Strategies

- Together, 2 hot tubs cost \$6094.  
 The difference between their prices is \$2304.  
 What is the price of the more expensive hot tub?
- Colin's grandma gave him \$100.  
 He bought a game for \$61.  
 He wants to buy another game that costs \$47.  
 How much more money does Colin need?



### Reflect

Choose one of the *Practice* questions.  
 Describe how you solved the problem.