

Problem Solving: Make an Organized List

Theme Park Brian has four passes to a theme park. He could bring himself and three friends. The group of friends for him to choose from includes Art, Ned, Jeff, and Belinda. How many different combinations are possible?

Read and Understand

Step 1: What do you know?

There are four friends: Art, Ned, Jeff, and Belinda.

Step 2: What are you trying to find?

Find out how many different combinations of friends Brian can take.

Plan and Solve

Step 3: What strategy will you use?

Strategy: Make an Organized List

Brian, Art, Ned, Jeff, and Belinda. Brian has to be in each combination.

List the choices:

Brian, Art, Ned, Belinda
 Brian, Art, Ned, Jeff
 Brian, Art, Jeff, Belinda
 Brian, Ned, Jeff, Belinda

Answer: There are four combinations.

Look Back and Check

Is your work correct?

Yes, because each combination uses Brian. The way the list is organized shows that all ways were found.

Finish solving the problem.

- Ann, Mara, Jenny, Tina, and Sue are sisters. Two of the five sisters must help their father at his business each Saturday. How many combinations of two sisters are possible?

Ann	Mara	Jenny	Tina
Ann	Jenny		