Problem Solving: Number Patterns

Solve each problem.

1. During leap years, one extra day is added to the year. In the 21st century, the first four leap years are 2000, 2004, 2008, and 2012. Following this pattern, what will be the fifth leap year in the new century?

2. Phil made calendars for his friend. Each calendar had 12 pages, one for each month. How many pages did he make if he made 4 calendars?

3. David is making a beaded necklace. He has used 11 red beads, 9 orange beads, and 7 yellow beads. He wants to continue the pattern with white beads. How many white beads is he likely to use?

4. Diane made silver bracelets for members of her family. Each bracelet took her 30 minutes to make. If she spent 3 hours making bracelets, how many members of her family did she make bracelets for?

5. The first four tables at a craft show are numbered 13, 15, 18, and 22. If the pattern continues, what are the next two table numbers likely to be?

6. A craft sampler includes a bag of colored beads, 2 lengths of wire for a necklace or bracelet, a small container of glue, and a leather pouch. What is the total number of items in 12 samplers?