






1. Smithtown School collected cans of soup for a food drive.

Grade	Cans of Soup
First	
Second	
Third	
Fourth	

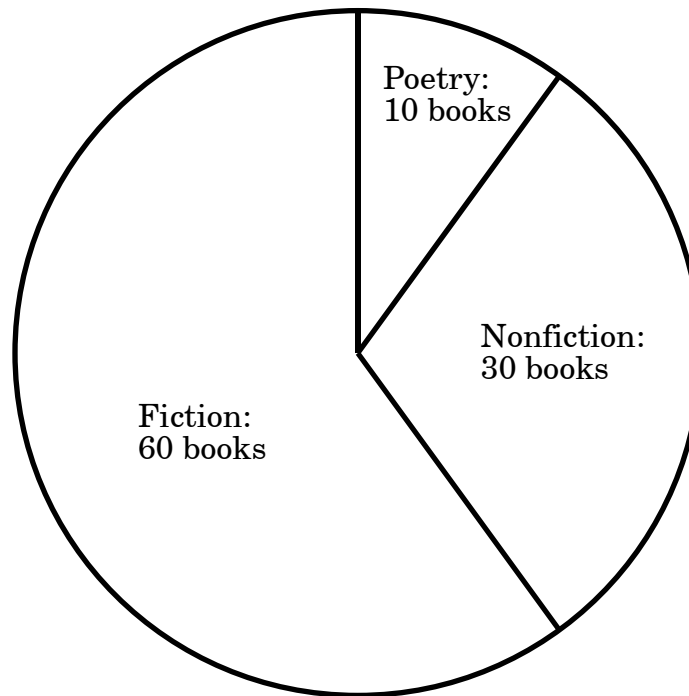
 = 6 cans

How many cans of soup did the third-grade class collect?

- A  $2\frac{1}{2}$
- B  $4\frac{1}{2}$
- C 15
- D 27

2. The following graph shows the number of books on the classroom bookshelf.

**Books on Classroom Bookshelf**



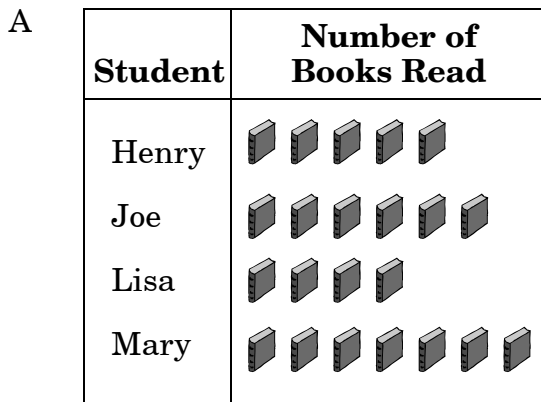
How many more fiction books are on the bookshelf than nonfiction and poetry books combined?


- A 100
- B 30
- C 20
- D 10

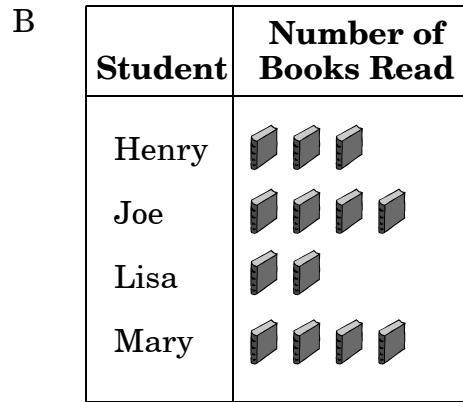
3. Four students kept a chart of how many books they read in one month.


Student	Number of Books Read
Henry	15
Joe	18
Lisa	12
Mary	21

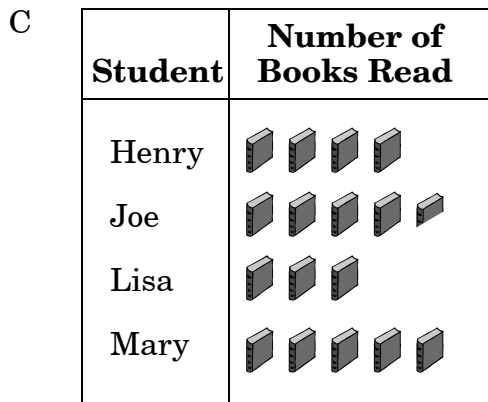
Which picture graph shows the same information as the chart?



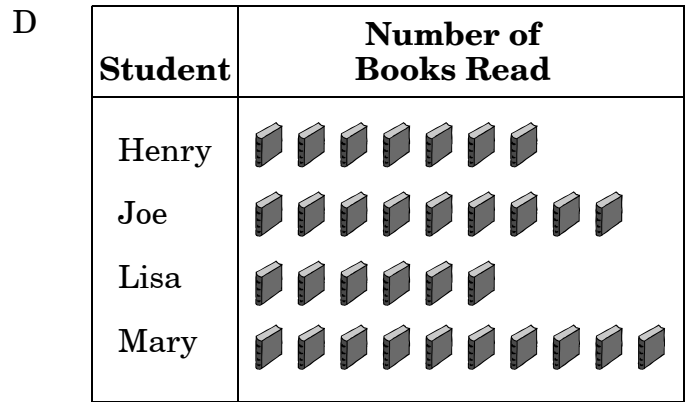
 = 3 Books




 = 5 Books

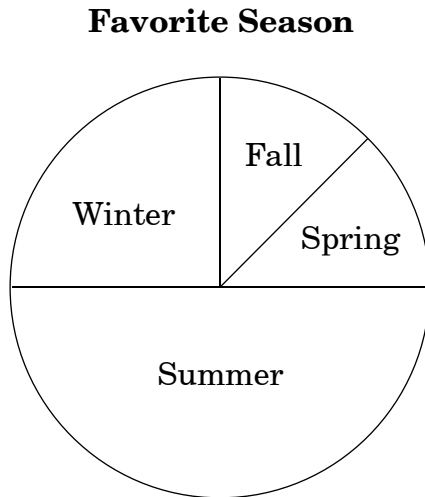


 = 4 Books



 = 2 Books

4. All 160 students at Westwood School voted for their favorite season. The results are shown in the graph.



How many students chose summer as their favorite season?

- A 120  
B 80  
C 40  
D 20
5. Tony's computer game has a three-digit secret code. The code has a 7, a 5, and a 3 in it. How many possible numbers could there be with these three digits?
- A 1  
B 4  
C 6  
D 9

6. Maria wants to take some of her toys to her grandmother's house. Maria has a video game, a stuffed animal, and a doll. How many choices does she have if she can pick 2 different items to take to her grandmother's house?

- A 2  
B 3  
C 6  
D 9

7. Marty, Sarah, and Alex had to stand in line for lunch. From how many different orders could they choose to stand in line so that Alex is in the middle?

- A 6  
B 3  
C 2  
D 1

8. Max is selling candy bars. He has chocolate bars, nut bars, and mint bars. If a customer buys two bars, and the bars are not of the same type, how many different combinations are possible?
- A 3
- B 6
- C 9
- D 12

### **End of Goal 4 Sample Items**

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## Math Goal 4

### Sample Items Key Report

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|----------|--|----------------------------------|--------------------------|
| <b>1</b> | <b>Objective:</b> 4.01<br>Collect, organize, analyze, and display data (including circle graphs and tables) to solve problems. | <b>Thinking Skill:</b> Applying  | <b>Correct Answer:</b> D |
| <b>2</b> | <b>Objective:</b> 4.01<br>Collect, organize, analyze, and display data (including circle graphs and tables) to solve problems. | <b>Thinking Skill:</b> Analyzing | <b>Correct Answer:</b> C |
| <b>3</b> | <b>Objective:</b> 4.01<br>Collect, organize, analyze, and display data (including circle graphs and tables) to solve problems. | <b>Thinking Skill:</b> Applying  | <b>Correct Answer:</b> A |
| <b>4</b> | <b>Objective:</b> 4.01<br>Collect, organize, analyze, and display data (including circle graphs and tables) to solve problems. | <b>Thinking Skill:</b> Applying  | <b>Correct Answer:</b> B |
| <b>5</b> | <b>Objective:</b> 4.02<br>Determine the number of permutations and combinations of up to three items.                          | <b>Thinking Skill:</b> Analyzing | <b>Correct Answer:</b> C |
| <b>6</b> | <b>Objective:</b> 4.02<br>Determine the number of permutations and combinations of up to three items.                          | <b>Thinking Skill:</b> Analyzing | <b>Correct Answer:</b> B |
| <b>7</b> | <b>Objective:</b> 4.02<br>Determine the number of permutations and combinations of up to three items.                          | <b>Thinking Skill:</b> Applying  | <b>Correct Answer:</b> C |
| <b>8</b> | <b>Objective:</b> 4.02<br>Determine the number of permutations and combinations of up to three items.                          | <b>Thinking Skill:</b> Analyzing | <b>Correct Answer:</b> A |