## Contents

Lesson 1  Collecting Data ................................................................. 4  
Lesson 2  Recording Data ............................................................... 6  
Lesson 3  Statistics: Mode and Range .............................................. 8  
Lesson 4  Tables ................................................................. 10  
Lesson 5  Tally Tables ............................................................... 12  
Lesson 6  Frequency Tables ......................................................... 14  
Lesson 7  Pictographs ................................................................. 16  
Lesson 8  More Pictographs ......................................................... 18  
Lesson 9  Making Pictographs ....................................................... 20  
Lesson 10  Bar Graphs .............................................................. 22  
Lesson 11  More Bar Graphs ......................................................... 24  
Lesson 12  Making Bar Graphs ...................................................... 26  
Lesson 13  Line Graphs ............................................................... 28  
Lesson 14  More Line Graphs ......................................................... 30  
Lesson 15  Making Line Graphs ..................................................... 32  
Lesson 16  Line Plots ............................................................... 34  
Lesson 17  More Line Plots .......................................................... 36  
Lesson 18  Making Line Plots ......................................................... 38  
Lesson 19  Circle Graphs ............................................................ 40  
Lesson 20  Venn Diagrams ........................................................... 42  
Lesson 21  Outcomes and Sample Space ......................................... 44  
Lesson 22  Probability ............................................................... 46  
How to Answer Constructed Response Questions ............................ 48
**Lesson 19: Circle Graphs**

A circle graph shows the parts of a whole. Each section represents a part of the entire amount.

A bag contains three kinds of charms. What fraction of the charms are stars?

**CHARMS IN BAG**

- Moons: \(\frac{1}{8}\)
- Hearts: \(\frac{1}{2}\)
- Stars: \(\frac{3}{8}\)

Add the given fractions:

\[
\frac{1}{2} + \frac{1}{8} = \frac{4}{8} + \frac{1}{8} = \frac{5}{8}
\]

Then subtract from 1:

\[
1 - \frac{5}{8} = \frac{8}{8} - \frac{5}{8} = \frac{3}{8}
\]

So \(\frac{3}{8}\) of the charms are stars.

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**Read each problem. Circle the letter of the best answer.**

Use this circle graph to answer questions 1–4.

**SIZES OF POST OFFICE BOXES**

- Extra large: 12
- Large: 18
- Medium: 24
- Small: 18

1. How many more medium post office boxes are there than small post office boxes?
   - A 6
   - B 8
   - C 12
   - D 18

2. How many total post office boxes are there?
   - A 48
   - B 64
   - C 72
   - D 80

3. What fraction of the post office boxes are extra large?
   - A \(\frac{1}{12}\)
   - B \(\frac{1}{6}\)
   - C \(\frac{1}{4}\)
   - D \(\frac{1}{3}\)

4. Each large post office box costs $200 a year to rent. How much money does the post office make on the rental of all large post office boxes each year?
   - A $1,200
   - B $2,400
   - C $3,600
   - D $4,800

**The circle graph shows 24 medium and 18 small post office boxes. Subtract to find the difference: 24 - 18 = 6. The correct answer is A.**
Read each problem. Write your answers.

5 A sporting goods store has 80 sweatshirts on sale. The colors of the sweatshirts are shown in the circle graph at the right.

A How many of these sweatshirts are red?

Answer: __________

B Explain how you found your answer.
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________

6 Marla bought some bagels for a party. The types of bagels are shown in the circle graph at the right.

A What fraction of the bagels are cheddar?

Show your work.

Answer: __________

B Explain how you found your answer.
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
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