Name: _____ Date: _____

Cumulative Review

for Chapters 5 and 6

Concepts and Skills

Complete. Use the data in the table. *(Lesson 5.1)*

The ages of four cousins are shown.

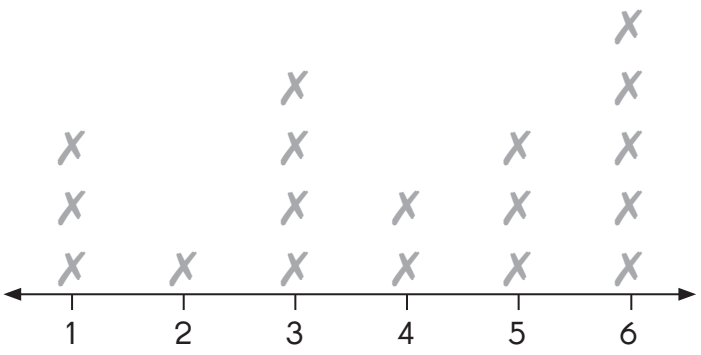
8, 12, 10, 6

1. The sum of their ages is _____ years.

2. The mean age of the cousins is _____ years.

Answer each question. Use the data in the line plot. *(Lesson 5.2)*

A group of hikers made a line plot to show the number of mountains they climbed. Each ✗ represents one hiker.



Number of Mountains Climbed

3. What is the median number of mountains climbed? _____

4. What is the range of the set of data? _____

5. What is the mode of the set of data? _____

Make a stem-and-leaf plot to show the data. *(Lesson 5.3)*

6. A group of friends went bowling and recorded these scores.

75 73 79 84 98 64 84 67

Bowling Scores	
Stem	**Leaves**

9|8 = 98

Complete. Use the data in your stem-and-leaf plot.

7. _____ is the mode.

8. _____ is the median.

9. _____ is the range.

10. _____ is an outlier.

11. How do the mode and median each change if you disregard the outlier?

_____

_____

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Write *more likely, less likely, equally likely, certain,* or *impossible*. *(Lesson 5.4)*

A bag has 8 blue marbles and 2 orange marbles. Describe the likelihood of each outcome.

12. An orange marble is chosen. _____

13. A blue marble is chosen. _____

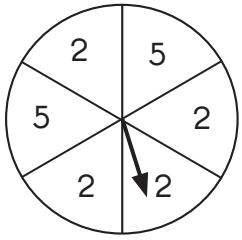
14. A red marble is chosen. _____

15. A blue or an orange marble is chosen. _____

Solve. Use the scenario above. *(Lesson 5.4)*

16. How would you change the number of each colored marble in the bag so that it is more likely that an orange marble is chosen?

Look at the spinner. Write the probability of each outcome as a fraction. *(Lesson 5.5)*



17. Probability of landing on 2 = ☐

18. Probability of landing on 6 = ☐

Add or subtract. Write each answer in simplest form. *(Lessons 6.1 and 6.2)*

19. $\frac{3}{4} + \frac{1}{12} + \frac{1}{6} =$

20. $\frac{9}{10} - \frac{1}{5} - \frac{1}{2} =$

Write the amount of water in each set of 1-liter containers as a mixed number. *(Lesson 6.3)*

21.

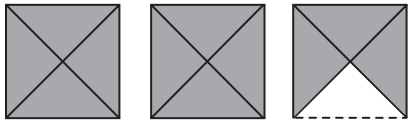
L

22.

L

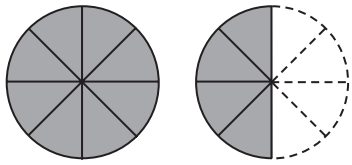
Express the shaded part of each figure as a mixed number or an improper fraction. *(Lessons 6.4 and 6.5)*

23.



$2\frac{3}{4}$ or

24.



or $\frac{12}{8}$

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Express each improper fraction as a mixed number. *(Lesson 6.5)*

25. $\frac{9}{7} =$ ☐

26. $\frac{20}{9} =$ ☐

Express each mixed number as an improper fraction. *(Lesson 6.5)*

27. $3\frac{2}{5} =$ ☐

28. $2\frac{8}{9} =$ ☐

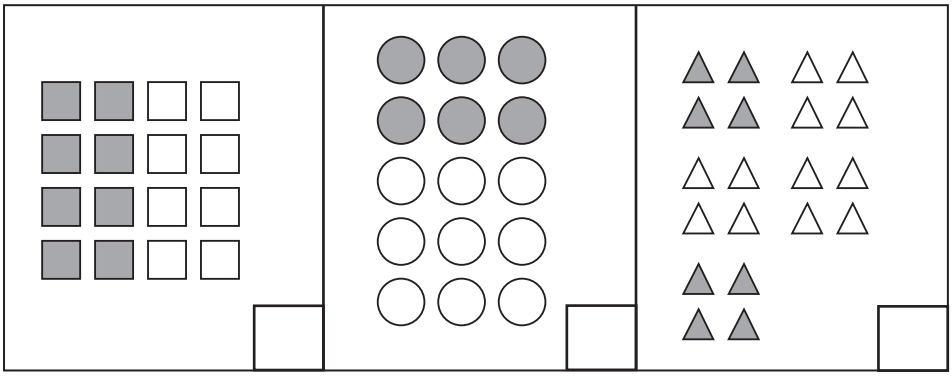
Add or subtract. *(Lesson 6.6)*

29. $2 + \frac{2}{5} + \frac{1}{10} =$ ☐

30. $3 - \frac{3}{4} - \frac{5}{8} =$ ☐

Check (✓) each set in which $\frac{2}{5}$ of the figures are shaded. *(Lesson 6.7)*

31.



Solve. *(Lesson 6.7)*

32. $\frac{2}{3}$ of 15 = _____

33. $\frac{3}{5}$ of 40 = _____

Problem Solving

Solve. Show your work.

34. Teams A, B, C, and D were in a tournament. The average score of the 4 teams was 92. Team A scored 78 points, Team B scored 95 points, and Team C scored 88 points.

a. How many points did Team D score?

b. Find the range of the scores. Hence, state the difference in score between the winning team and the losing team.

35. Michael scored 15, 21, and 24 in the first three basketball games of the season.

a. What is his mean score?

b. What is the range of his scores?

c. How many points must he score in the next game to achieve a mean score of 27?

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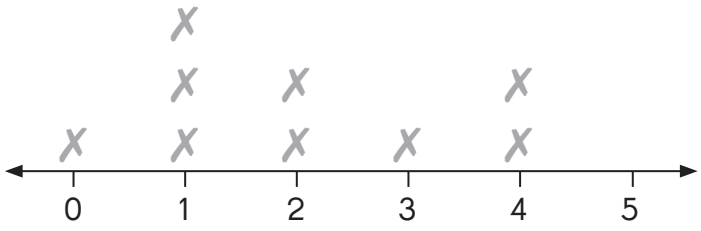
36. Samuel and Kenneth collect sports cards. The average number of cards they have is 248. Samuel has 3 times as many cards as Kenneth. How many cards does each boy have?

37. A group of students made a list of the states where they were born. The line plot shows the number of times the letter 'A' appears in the name of each state. Each ✗ represents one state.



Number of Times Letter 'A' Appears

Complete. Use the data in the line plot.

a. What is the mode of the set of data? _____

b. What is the mean number of times the letter 'A' appears? _____

c. Is the name of a state more likely to have 1 or 2 'A's? Explain your answer.

_____

_____

d. According to the data, what is less likely to happen? Explain your answer.

_____

_____

38. The stem-and-leaf plot shows the number of pages in 8 books.

Number of Pages	
Stem	**Leaves**
2	1 5
3	0 5 5 7
4	3 6

2|1 = 21

a. Which stem has only odd numbers for its leaves? _____

b. Find the median of the set of data. _____

c. Find the mode of the set of data. _____

d. Find the range of the set of data. _____

e. Which of the above measures tells you the difference in the number of pages between the thickest and the thinnest books? _____

f. Is there an outlier in the set of data?
Explain your answer.

_____

_____

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39. A cube is numbered from 1 to 6 and tossed once. What is the probability of tossing

a. a 5 or a 6? ☐

b. an odd number? ☐

40. Sasha has 40 stamps in her collection. 12 of them are from foreign countries.

a. What fraction of the stamps are foreign stamps?

b. What fraction of the stamps are U.S. stamps?

41. A string is 1 foot long. Blake cuts off 3 inches of the string. What fraction of the string is left?

42. Pedro scored $\frac{1}{4}$ of all the goals scored during a soccer game. He scored 2 goals. How many goals were not scored by Pedro?