Telling Time

Write the time shown on each clock in two ways.

1.

_____

_____

2. `7:28`

_____

_____

_____
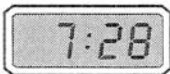
3. Jessica has a piano lesson on Saturday
   at 2:00. Is it A.M. or P.M.?

_____

4. Reasoning The digits displayed on this clock are all
   the same number. List all of the times when this is true.   `5:55`

_____

5. Estimation The time is 2:57 P.M. About what
   time will it be in an hour and a half?

_____

Test Prep

6. Which time is shown on the clock?

   A. 8:24   **B.** 8:34

   C. 8:44   **D.** 8:54

7. Writing in Math List two events that could happen
   in the A.M. and two events that could happen in the P.M.

_____

_____

_____

Name_____

Units of Time

Write >, <, or = for each ◯.

1. 48 hours ◯ 4 days

2. 1 year ◯ 12 months

3. 60 minutes ◯ 2 hours

4. 17 days ◯ 2 weeks

5. 5 months ◯ 40 weeks

6. 1 millennium ◯ 10 centuries

7. 6 decades ◯ 1 century

8. 5 decades ◯ 48 years

9. Cheryl's grandparents have been married for 6 decades. How many years have they been married?

_____

10. Tom was in elementary school from 1997 to 2002. How much time was that in years?

_____

The Declaration of Independence was signed on July 4, 1776.
The United States celebrated the bicentennial on July 4, 1976.
How much time was that in

11. years? _____

12. decades? _____

Test Prep

13. 49 days =

A. 5 weeks   **B.** 6 weeks   **C.** 7 weeks   **D.** 8 weeks

14. Writing in Math Which is longer: 180 sec or 3 min? Explain how you decided.

_____

_____

_____

_____

Name_____

Elapsed Time

Find each elapsed time.

1. Start: 3:52 P.M.
Finish: 4:10 P.M.

_____

2. Start: 11:35 A.M.
Finish: 12:25 P.M.

_____

3. Start: 3:15 P.M.
Finish: 5:00 P.M.

_____

4. Start: 8:20 A.M.
Finish: 2:35 P.M.

_____

Write the time each clock will show in 30 min.

5.

_____

6.

_____

7.
```
8:42
```

_____
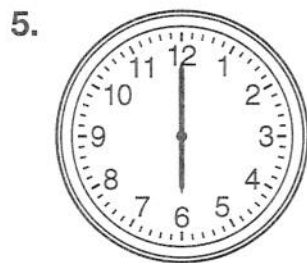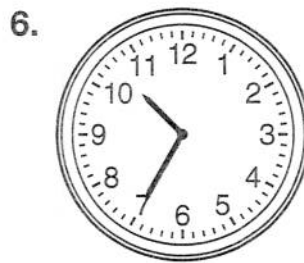
8. Number Sense Max says that the elapsed time from 11:55 A.M. to 1:10 P.M. is more than an hour and a half. Is he correct? Explain.

_____

Test Prep

9. Gary began eating lunch at 12:17 P.M. and finished at 1:01 P.M. Which is the elapsed time?

A. 41 min   **B.** 42 min   **C.** 43 min   **D.** 44 min

10. Writing in Math Ella went in the swimming pool at 1:20 P.M. She swam for 1 hr and 20 min. What time was it when she finished swimming?

_____

Name_____

Writing to Compare

1. Write two statements comparing the times on the train schedule.

Train Schedule

Stop	Downtown	A	B	C	D	E	F	G	Uptown
Blue Line	8:00	8:02	8:06	8:10	8:20	8:26	8:32	8:40	8:46
Red Line	8:05	—	8:10	8:14	—	8:28	—	8:38	8:44

_____

_____

_____

Summer Day-Camp Schedule

Group 1	Group 2	Times
First aid	Badminton	9:50–10:20
Swimming	Gardening	10:25–11:00
Computers	Sewing	11:05–11:35
Writing	Swimming	11:40–12:05
Lunch	Lunch	12:10–12:45

2. How long is the first-aid class?   _____

3. How long is the gardening class?   _____

4. How much time do campers have between
   classes?   _____

5. Write two statements comparing the schedules of Group 1 and Group 2.

_____

_____

_____

Name_____

Calendars

Use the October and November calendars for 1–8.

October						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

November						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Find the date

1. six weeks after October 9th.

2. two weeks before November 24th.

3. one week after October 30th.

4. three weeks after November 1st.

5. Suppose you have guitar lessons every Wednesday. What are the dates of your lessons in October?

6. **Number Sense** Find the date five days after November 30, without a calendar.

Test Prep

7. Which amount of time is greatest?

   A. 30 days

   B. the number of days in October

   C. the number of days in November

   D. All of the above are equal.

8. **Writing in Math** Use the October calendar. Explain how you can find the number of days that are between October 8th and October 23rd without counting the days.

Pictographs

How many people prefer a

Favorite Books

Mystery	📖📖📖📖📖📖📖
Western	📖📖📖
Science fiction	📖📖📖📖📖
Biography	📖📖
Adventure	📖📖📖📖📖📖

Each 📖 = 10 people.

1. western book?

   _____

2. mystery book?

   _____

3. About how many more people will read an adventure book than a science-fiction book?

   _____

4. **Number Sense** Do more than or less than twice as many people prefer science fiction than biography?

   _____

5. Make a pictograph of the data about Angela's leaf collection.

Angela's Leaf Collection	
Tamarac	11
Silver birch	7
Oak	5
Maple	10
Sassafras	15

Test Prep

Use the Favorite Books pictograph for 6 and 7.

6. Which type of book was chosen by about 15 people?

   A. Adventure   **B.** Biography   **C.** Mystery   **D.** Science fiction

7. **Writing in Math** Write your own problem for this pictograph. Then solve it.

   _____

Line Plots

How many soccer teams scored

1. 5 goals?

_____

2. 2 goals?

_____

3. 3 goals?

_____

```
                              ×
                     ×        ×
            ×        ×    ×   ×
            ×        ×    ×   ×
    ×  ×  ×  ×  ×  ×  ×  ×  ×
    +--+--+--+--+--+--+--+--+--
    0  1  2  3  4  5  6  7  8
```

Number of Soccer Goals

4. **Number Sense** Suppose the line plot was made in the middle of the season. For the teams that have scored 7 goals, how many goals do you predict they will score at the end of the season? _____

5. Make a line plot of the grams of protein in the food listed.
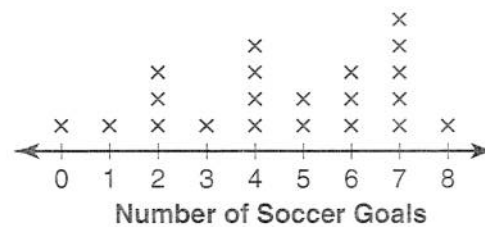
Grams of Protein in One Serving

Food	Grams
Bacon	6
Black beans	15
Cheese pizza	15
Crabmeat	23
Fish stick	6
Great northern beans	14

Test Prep

Use the Soccer League line plot for 6 and 7.

6. How many teams are recorded on the line plot?

A. 18   **B.** 19   **C.** 20   **D.** 21

7. **Writing in Math** Is there an outlier in the data? Explain.

_____

Name_____

Bar Graphs

How many free-throw shots did

Free-Throw Shots

1. Jan make?

_____

2. Bob make?

_____
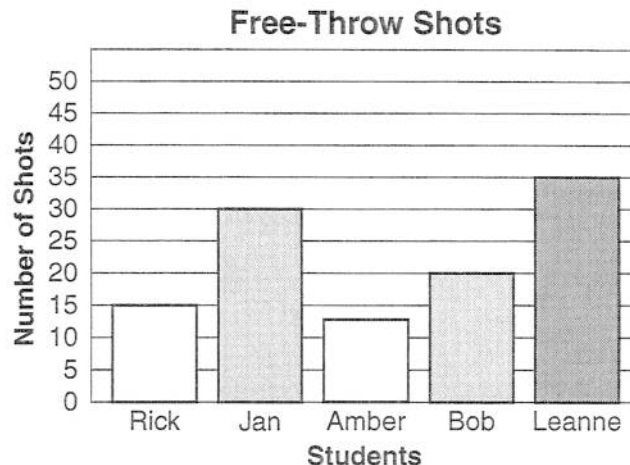
Who made

3. 35 free-throw shots?

_____

4. 15 free-throw shots?

_____

5. **Number Sense** How can you easily tell who completed about the same number of free-throw shots?

_____

_____

Test Prep

6. What are the numbers that show the units on a graph called?

   A. Scale   **B.** Intervals   **C.** Horizontal axis **D.** Vertical axis

7. **Writing in Math** Describe the interval you would use for a bar graph if the data ranges from 12 to 39 units.

_____

_____

_____

Name_____

Graphing Ordered Pairs

Name the ordered pair for each point.

1. *P* _____   **2.** *H* _____

3. *L* _____   **4.** *F* _____

5. *K* _____   **6.** *Z* _____
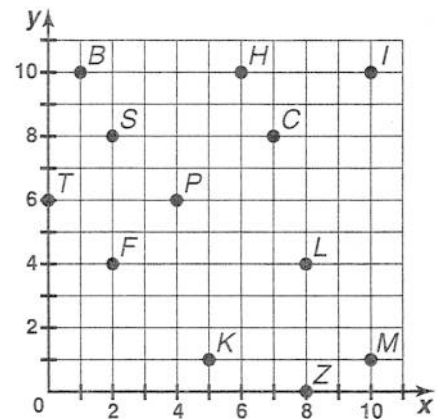
Give the letter of the point named by each ordered pair.

7. (7, 8) _____   **8.** (10, 1) _____   **9.** (2, 8) _____

10. (0, 6) _____   **11.** (10, 10) _____   **12.** (1, 10) _____

13. Number Sense How are the coordinates (1, 2) and (3, 2) related?

_____

_____

Test Prep

14. Which letter is named by (9, 3)?

A. *A*   **B.** *B*

C. *C*   **D.** *D*
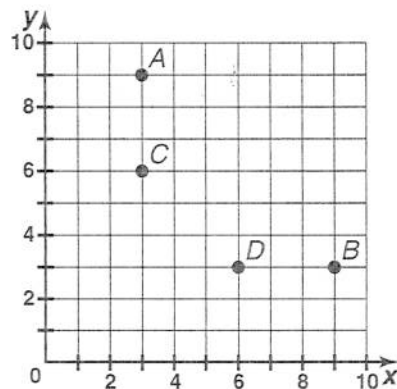
15. Writing in Math Explain how to plot point *G* (2, 7) on a coordinate grid.

_____

_____

_____

Name_____

Line Graphs

In the Fourth-Grade Reading Program, how many pages were read in

Fourth-Grade Reading Program

1. October?

_____

2. February?

_____

3. April?

_____

4. Draw a line graph showing Barbara's exercise time.
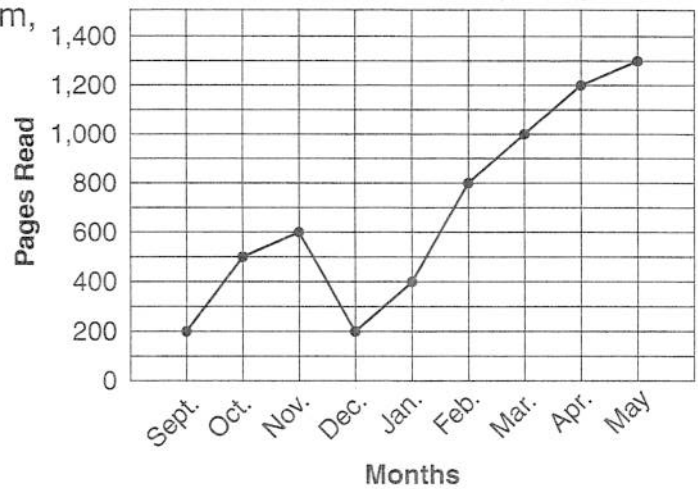
Barbara's Exercise Times

Day	Length of Time
1	25 min
2	30 min
3	40 min

5. **Reasoning** What is the trend in the data?

_____

_____

Test Prep

6. What is an increase or decrease on a line graph called?

   A. Trend   **B.** Median   **C.** Mode   **D.** Range

7. **Writing in Math** Explain how a line graph is similar to a bar graph.

_____

Name_____

Make a Graph

Complete the graph to solve each problem.

1.

Time from Seed to Harvest

Vegetable	Days
Bell pepper	75
Green bean	56
Pea	75
Radish	23
Tomato	73

Time from Seed to Harvest

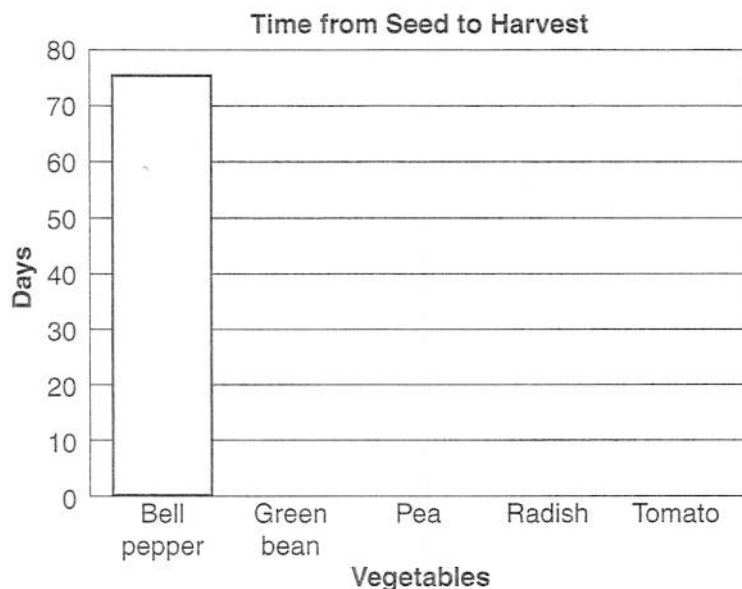**2.** Which vegetables take the greatest amount of time to harvest? How much greater is this number of days than the number of days needed to harvest radishes?

_____

_____

3. Which vegetable plant will be ready to harvest earlier, the bell pepper plant or the tomato plant? How many days earlier?

_____

4. **Number Sense** Which vegetable plants will be ready to harvest within 5 days of the tomato plant?

_____

5. Write the missing numbers.   7, 10, 13, 16, _____, _____, _____

Name_____

Median, Mode, and Range

Find the median, mode, and range of each set of data.

1. 1, 3, 10, 8, 7, 3, 11

_____

2. 48, 50, 62, 50, 54

_____

3. 92, 99, 99, 106, 99, 97
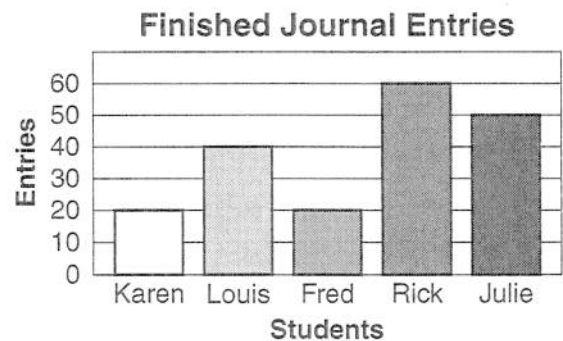
_____

4. 80, 85, 87, 80, 89

_____

5. 10, 11, 12, 14, 10, 15, 16, 10, 11, 9, 10, 17, 10

_____

6. 5, 15, 17, 5, 11, 5, 10, 12, 5, 7, 14, 9, 5

_____

7. **Number Sense** Could 5 be the mode of 5, 9, 7, 5, 8, 7, 10, and 7? Explain.

_____

_____

Use the bar graph.

8. Find the median, mode, and range of the finished journal entries.

_____

Finished Journal Entries

Test Prep

9. The range of 1, 3, 4, 6, 1, 3, 4, 2, 7, 4, 1, and 4 is

   A. 5   **B.** 6   **C.** 7   **D.** 8

10. **Writing in Math** Tell when a set of data can have no mode.

_____

_____

Name_____

Data from Surveys

Use the data in the tally chart.

Favorite Frozen Yogurt	
Banana	III
Blueberry	ЖНТ ЖНТ II
Strawberry	ЖНТ
Vanilla	ЖНТ III

1. How many people in the survey liked strawberry-flavored frozen yogurt best?

   _____

2. Which flavor of frozen yogurt received the most votes?

   _____

3. How many people liked vanilla frozen yogurt best?

   _____

4. How many people were surveyed?

   _____

5. **Number Sense** Could the frozen yogurt survey help restaurants choose flavors of frozen yogurt? Explain.

   _____

   _____

   _____

Test Prep

6. Which is the last step in taking a survey?

   A. explain the results

   C. write a survey question

   B. count tallies

   D. make a tally chart and ask the question

7. **Writing in Math** Give an example of a topic for a survey question where the results for the answers could be similar.

   _____

   _____

   _____

Name_____

Misleading Graphs

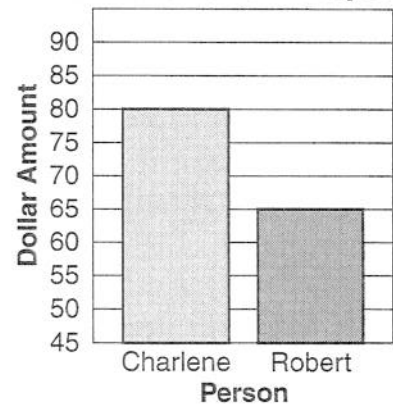Use the Price Paid for CD Player bar graph for 1–4.

Price Paid for CD Player

1. Looking at the graph, how much more does it seem Charlene paid compared to Robert?

_____

2. What was the cost for each CD player?

_____

_____

3. Did Charlene pay twice as much as Robert for her player? _____
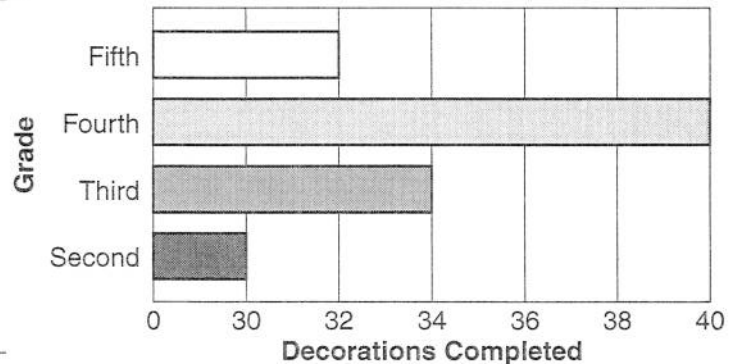
4. Why is the graph misleading?

_____

Use the Party Decorations Challenge bar graph for 5–7.

Party Decorations Challenge

5. Looking at the graph, how many more party decorations does it seem the third grade made compared to the second grade?

_____

6. Did the fourth grade complete twice the number of party decorations compared to the third grade?

_____

Test Prep

7. **Writing in Math** Describe a better scale to use for this bar graph.

_____

_____

Name_____

The Newbery Medal

Since 1923, the Newbery Medal has been awarded by the American Library Association to authors of the most distinguished contributions to American literature for children. The award-winning books belong to a variety of genres that include biography, historical fiction, and science fiction.

Title and Author	Year	Chapters	Pages
A Year Down Under by Richard Peck	2001	8	130
Maniac Magee by Jerry Spinelli	1991	46	184
Jacob Have I Loved by Katherine Patterson	1981	20	215

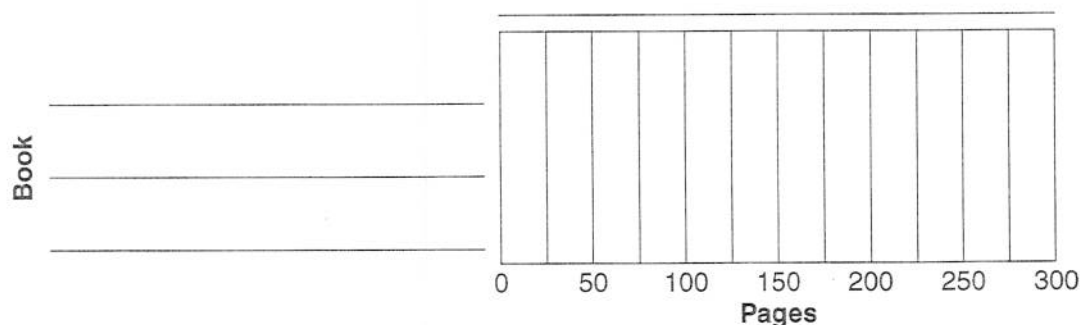The table above gives information about three Newbery Medal winners.

1. Complete the pictograph for the number of chapters in the three books.

Chapters in Three Newbery Medal Books

Book	Chapters
A Year Down Under	
Maniac Magee	

Each ▉ = 2 chapters.

2. Complete the bar graph for the number of pages in each book.

Book

| | 0 | 50 | 100 | 150 | 200 | 250 | 300 |

Pages

3. Describe the pattern you see between the years the medals were awarded.

_____