Mathematics Grade 6 Unit 09: Statistical Representations and Analysis
2012-2013

1 Professional basketball players can lose as much as 12 pounds of water weight each ball game. The list below shows the number of pounds lost by seven players during one basketball game.

3, 4, 2, 8, 11, 5, 8

What are the median and mode for the data set?

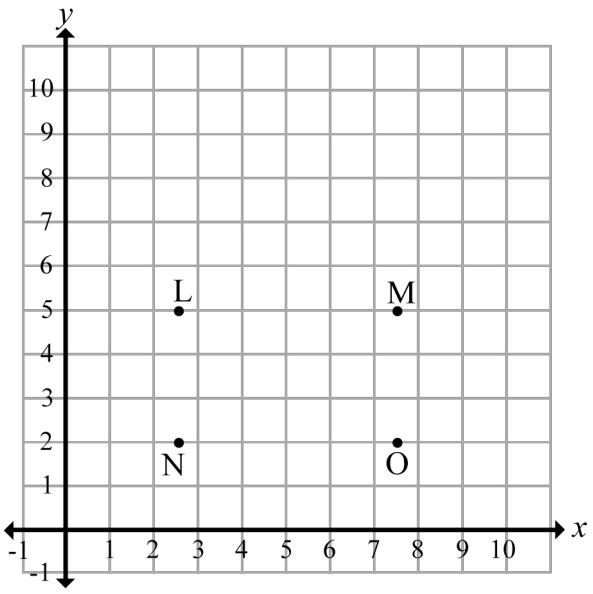
A median 11, mode 8

B median 5, mode 5

C median 5, mode 8

D median 11, mode 9

2 The coordinate grid below displays the rectangle LMON.



Which ordered pairs of the vertices represents the rectangle LMON?

F L(2.5, 5); M(7.5, 5); N(2.5, 2); O(7.5, 2)

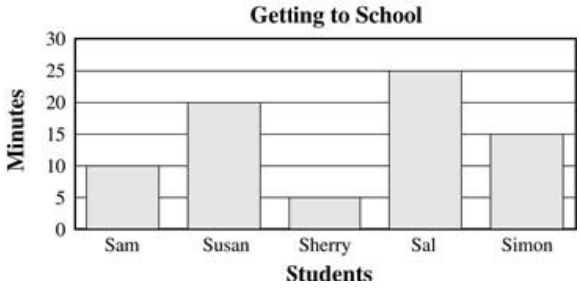
G L(2.5, 2); M(7.5, 2); N(2.5, 5); O(7.5, 5)

H L(5,2. 5); M(5, 7.5); N(2, 2.5); O(2, 7.5)

J L(5, 5); M(2, 2); N(7, 7); O(4, 4)

GO ON

3 The graph below shows how long it takes several students in Manny's class to get to school.



It takes Manny 15 minutes to get to school. How many of these students take less time than Manny to get to school?

A 1 student

B 2 students

C 3 students

D 4 students

4 Gloria earns $600 a month working after school and on weekends. The chart shows how she budgets her income.

Food	$200
Clothing	$150
Transportation	$50
Entertainment	$100
Savings	$100

Which type of graph would be most appropriate to display how she spends her income?

F bar graph

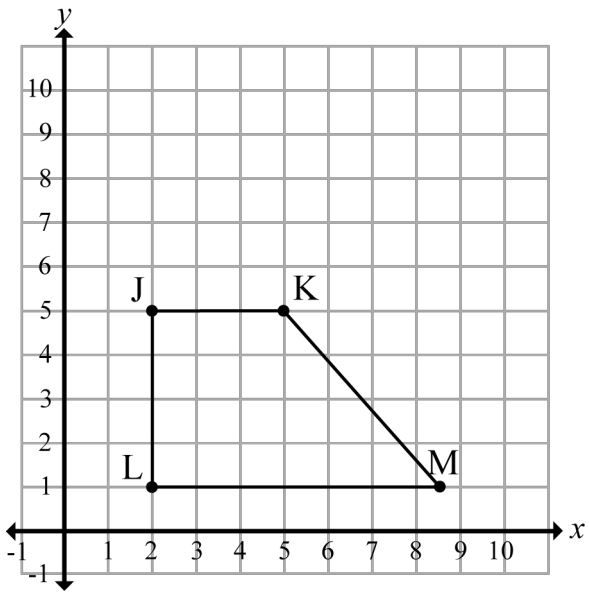
G line plot

H circle graph

J stem-and-leaf plot

GO ON

5 What coordinate points best represent Point M?



A (2, 5)

B (5, 5)

C (8.5, 1)

D (1, 8.5)

GO ON

6 Hollyfield Middle School held an election for Homecoming Queen. A total of 1000 votes were cast in the election. The table shows the number of votes cast for three of the five candidates.

Election Results

Candidate	**# of Votes**
Becky	273
Debbi	178
Margarita	321
Esther	
Tenesha	

Which of the following is a reasonable conclusion?

F Tenesha could receive the same number of votes as Debbie.

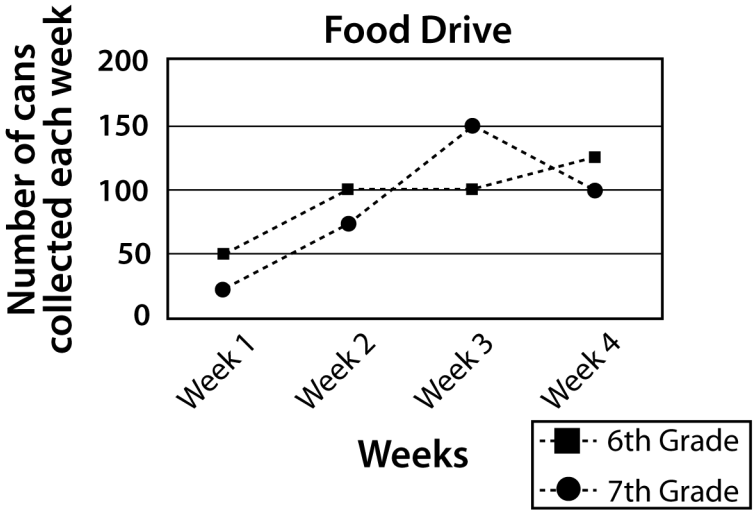
G Esther could receive more votes than Becky.

H Esther could receive the same number of votes as Margarita.

J Tenesha could receive more votes than Margarita.

GO ON

7 The graph below shows the number of cans collected each week during a food drive at a middle school.



What is the approximate total number of cans collected by both grades for weeks 1 and 2?

A 75 cans

B 150 cans

C 175 cans

D 250 cans

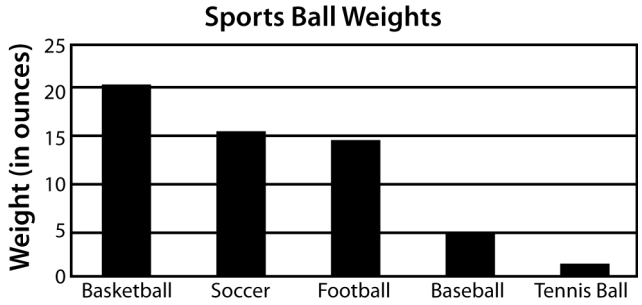
GO ON

8 This chart shows the weights of different sports balls.

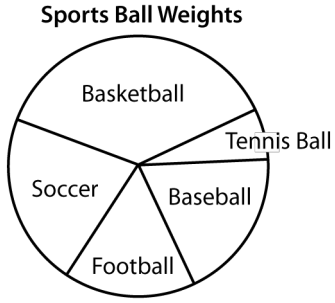
Sports Balls	Weight (in ounces)
Basketball	21
Soccer	16
Football	14
Tennis Ball	2
Baseball	5

Which graph is most appropriate for representing this data?

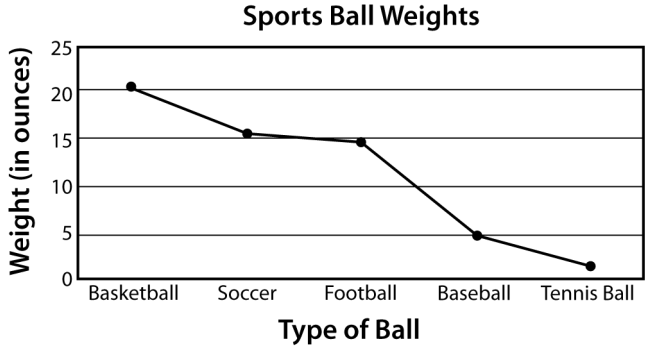
F



G



H



J Sports Ball Weights

Stem	Leaves
0	2 5
1	4 6
2	1

GO ON

9 A survey was conducted that asked students which room in the house they use to do their homework. The results of the suvey are shown in the chart below.

Room	**% Used**
Bedroom	40%
Dining Room	25%
Family Room	20%
Kitchen	15%

Draw and label a circle graph that represents the data in the chart.

10 There are 10 pink carnations and 6 white carnations in a flower arrangement. Sketch a circle graph to show the probability of picking a pink or picking a white carnation. Be sure to label your graph.

GO ON

11 Samantha's math class measured the heights of all 20 students in inches. The measurements are as follows: 63, 68, 58, 63, 58, 62, 59, 68, 67, 63, 64, 66, 70, 70, 62, 62, 60, 63, 70, and 59.

A. Make a stem-and-leaf plot using this data showing the number of students for each different height.

B. What was the mode for the heights in Samantha's class?

C. What was the median for the heights in Samantha's class?

12 The students at Ojeda Junior High collected the following data on their favorite movies.

Movie	Frequency
Cinderella	𝍸 ||
Madagascar	𝍸 𝍸 ||||
Kicking & Screaming	𝍸 ||||

Display this data using a statistical graph.

GO ON

13 Matt measures pitch speeds at professional baseball games. He measured the following pitch speeds in part of one inning.

90 mph (miles per hour)
88 mph
91 mph
89 mph
91 mph
95 mph
86 mph

Which answer correctly gives the mode and range for Matt's pitch speeds?

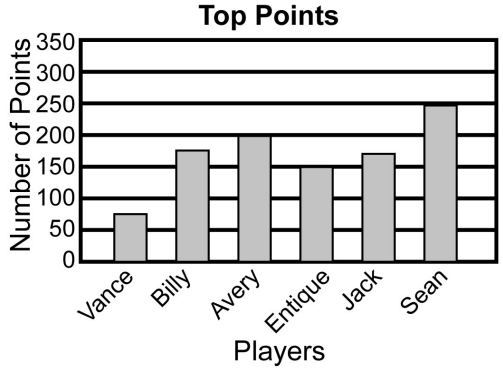
A Range: 6, Mode: 89

B Mode: 91, Range: 9

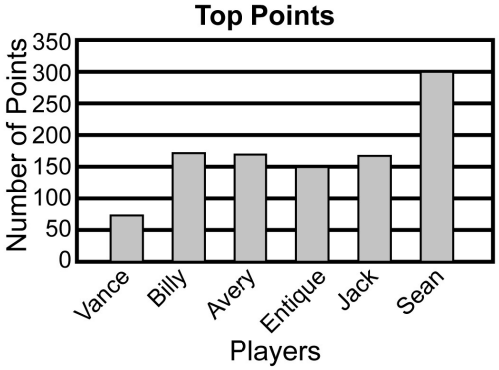
C Range: 90, Mode: 89

D Mode: 91, Range: 4

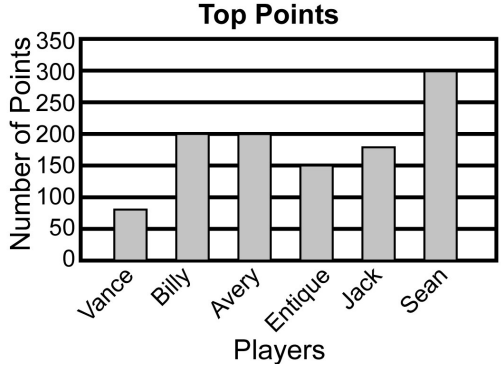
I



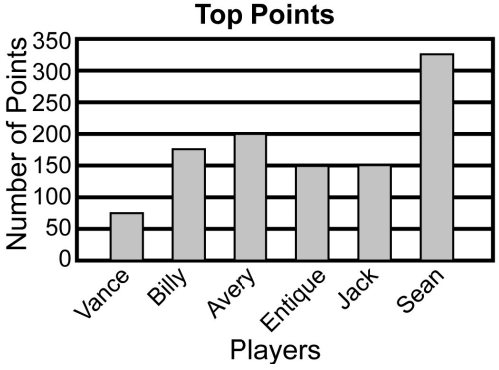
II



III



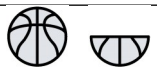
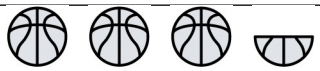
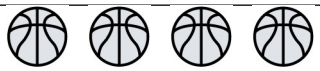
IV



GO ON

14 A basketball team played 72 games this season. This graph shows how many points the top 6 players scored during the season.

Top Points

Player	Number of Points
Vance	
Billy	
Avery	
Enrique	
Jack	
Sean	

 = 50 Points

Which bar graph correctly shows the number of points each player scored?

F Ⅰ

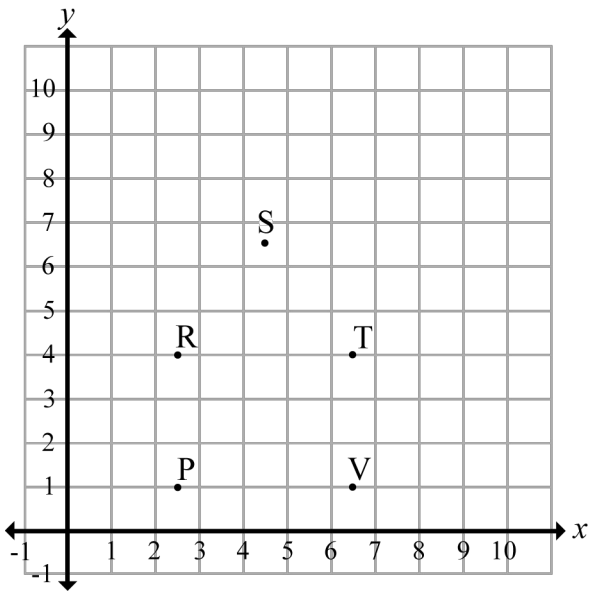
G Ⅱ

H Ⅲ

J Ⅳ

GO ON

15 There are four vertices of a pentagon, PRSTV, on the coordinate grid below. The fifth vertex of the pentagon is represented by point S.



Which of the following ordered pair's best represents point S?

A $(4\frac{1}{2}, 6\frac{1}{2})$

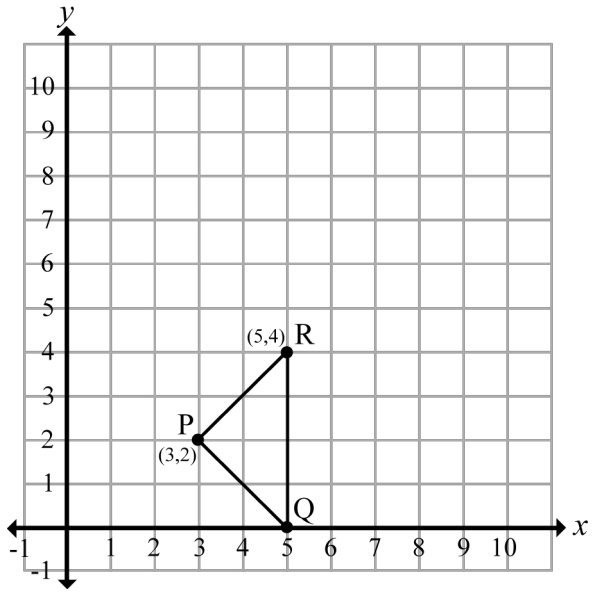
B $(1\frac{1}{2}, 5)$

C $(6\frac{1}{2}, 4\frac{1}{2})$

D $(5, 1\frac{1}{2})$

GO ON

16 What are the coordinate points for Q in the triangle PQR?



F (3, 2)

G (5, 4)

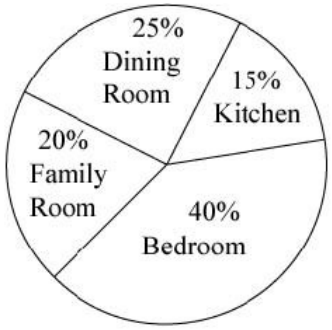
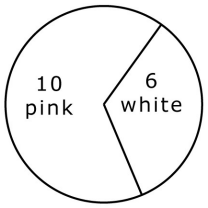
H (5, 0)

J (0, 5)

STOP

Test Key

Mathematics Grade 6 Unit 09: Statistical Representations and Analysis 2012-2013

##	Item #	Correct Answer	Primary SE	Secondary SE	Obj/Cat
1	M061096035D	C	6.10(B) [S]	None	STAAR: M5
2	M06021893CS	F	6.7(A) [S]	None	STAAR: M3
3	M061096037D	B	6.10(D) [R]	6.11(A) [P]	STAAR: M5
4	M061105493D	H	6.10(A) [S]	None	STAAR: M5
5	M06021891CS	C	6.7(A) [S]	None	STAAR: M3
6	M061105491D	F	6.10(D) [R]	None	STAAR: M5
7	M061105489D	D	6.10(D) [R]	6.11(D) [P]	STAAR: M5
8	M063040846	F	6.10(D) [R]	6.12(B)	STAAR: M5
9	M061105485D		6.10(C) [S]	None	STAAR: M5
10	M061087977D		6.10(C) [S]	None	STAAR: M5
11	M061088140D	Look at student's work. The stem and leaf should include the following stems and leaves: 5: 8, 8, 9, 9 6: 0, 2, 2, 2, 3, 3, 3, 3, 4, 6, 7, 8, 8 7: 0, 0, 0 B. mode: 63 C. Median: 63	6.10(B) [S]	None	STAAR: M5
12	M061061052RX	Answers will vary. The best choice is a bar graph since the data is discrete.	6.10(A) [S]	None	STAAR: M5
13	M061088142D	B	6.10(B) [S]	None	STAAR: M5
14	M063214442	J	6.10(A) [S]	None	STAAR: M5
15	M06021885CS	A	6.7(A) [S]	None	STAAR: M3
16	M06021889CS	H	6.7(A) [S]	None	STAAR: M3