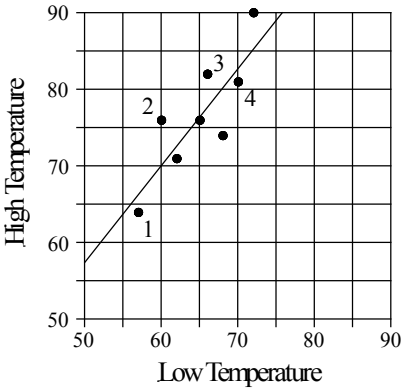
Chapter 8 Practice Test

Questions 1-3 refer to the following information.



The graph above is a scatter plot with 8 points, each representing the low temperature and high temperature of 8 days in September in a certain city. Both the low temperatures and high temperatures are measured in degrees Fahrenheit. The line of best fit for the data is also shown.

1

Based on the line of best fit for the data shown, how many degrees does the high temperature increase when the low temperature increases by one degree?

A) 0.9

B) 1.3

C) 1.6

D) 1.8

2

What is the predicted high temperature of the day when the low temperature is 58?

A) 65

B) 68

C) 71

D) 74

3

Among the four days marked 1, 2, 3, and 4 in the scatter plot, on which day is the difference between the high temperature and the low temperature minimal?

A) Day 1

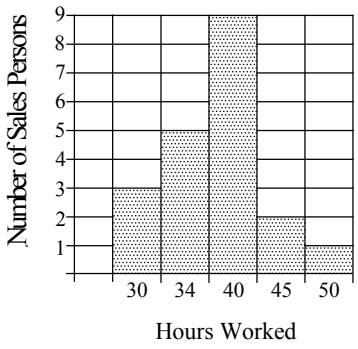
B) Day 2

C) Day 3

D) Day 4

4

Number of Hours Worked by the 20 Salespersons in Company G



Based on the histogram above, what is the average number of hours worked by the 20 salespersons in Company G?

A) 36

B) 37

C) 38

D) 39

Questions 5 and 6 refer to the following information.

Frequency Distribution for List A

Number	0	4	5	6
Frequency	8	10	12	10

Frequency Distribution for List B

Number	7	10	11	15
Frequency	10	8	10	12

The table above shows the frequency distribution of two lists. List A and list B each contain 40 numbers.

5

What is the difference between the average of the numbers in list B and the average of the numbers in list A?

A) 6.5

B) 7

C) 7.5

D) 8

6

List C contains 80 numbers: the 40 numbers in list A and the 40 numbers in list B. Let m be the average of 80 numbers in list C and M be the median of 80 numbers in list C. What is the value of $m - M$?

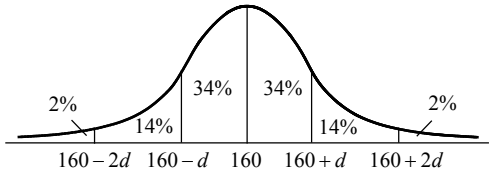
A) 1

B) 1.5

C) 2

D) 2.5

7



The figure above shows a standard normal distribution with mean of 160 and standard deviation d, including approximate percents of the distribution corresponding to the regions shown. If the value 148 is at the 12th percentile of the distribution, which of the following is the best estimate of the standard deviation d of the distribution?

A) 5

B) 10

C) 15

D) 20

8

The tables below give the distribution of ratings of two different laptops by 100 people each.

Ratings of Laptop A by 100 Reviewers

Ratings	5	4	3	2	1
Frequency	28	45	11	7	9

Ratings of Laptop B by 100 Reviewers

Ratings	5	4	3	2	1
Frequency	22	24	18	20	16

Which of the following is true about the data shown for the ratings of the two laptops?

A) The standard deviation of the ratings of laptop A is larger.

B) The standard deviation of the ratings of laptop B is larger.

C) The standard deviation of the two ratings are the same.

D) The standard deviation of the two ratings cannot be determined with the data provided.