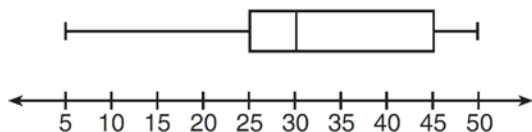


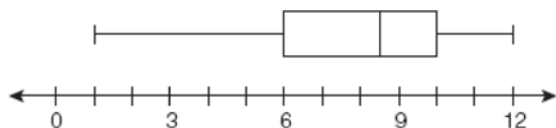
**A.S.6: Box-and-Whisker Plots 1: Understand how the five statistical summary (minimum, maximum, and the three quartiles) is used to construct a box-and-whisker plot**

- 1 In the box-and-whisker plot below, what is the 2nd quartile?



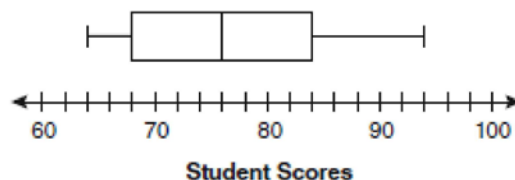
- 1) 25
- 2) 30
- 3) 45
- 4) 50

- 2 What is the value of the third quartile shown on the box-and-whisker plot below?



- 1) 6
- 2) 8.5
- 3) 10
- 4) 12

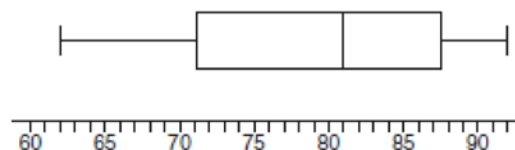
- 3 The box-and-whisker plot below represents students' scores on a recent English test.



What is the value of the upper quartile?

- 1) 68
- 2) 76
- 3) 84
- 4) 94

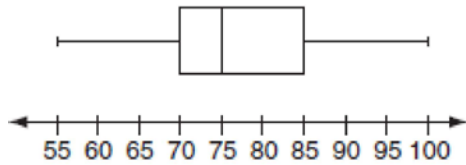
- 4 The accompanying diagram shows a box-and-whisker plot of student test scores on last year's Mathematics A midterm examination.



What is the median score?

- 1) 62
- 2) 71
- 3) 81
- 4) 92

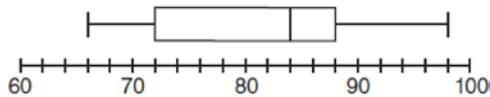
- 5 The accompanying box-and-whisker plot represents the scores earned on a science test.



What is the median score?

- 1) 70
- 2) 75
- 3) 77
- 4) 85

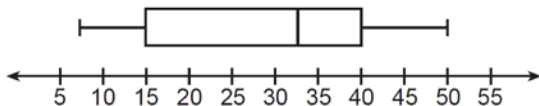
- 6 The box-and-whisker plot below represents the math test scores of 20 students.



What percentage of the test scores are *less than* 72?

- 1) 25
- 2) 50
- 3) 75
- 4) 100

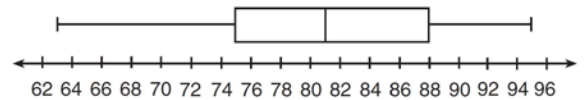
- 7 The box-and-whisker plot below represents the ages of 12 people.



What percentage of these people are age 15 or older?

- 1) 25
- 2) 35
- 3) 75
- 4) 85

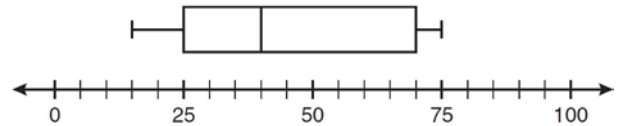
- 8 The box-and-whisker plot below represents a set of grades in a college statistics class.



Which interval contains exactly 50% of the grades?

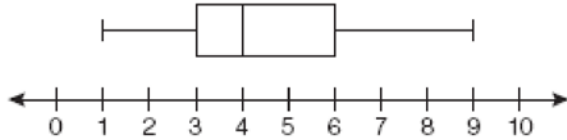
- 1) 63-88
- 2) 63-95
- 3) 75-81
- 4) 75-88

- 9 What is the range of the data represented in the box-and-whisker plot shown below?



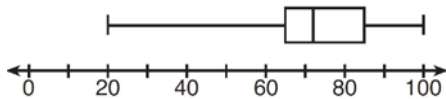
- 1) 40
- 2) 45
- 3) 60
- 4) 100

- 10 A movie theater recorded the number of tickets sold daily for a popular movie during the month of June. The box-and-whisker plot shown below represents the data for the number of tickets sold, in hundreds.



Which conclusion can be made using this plot?

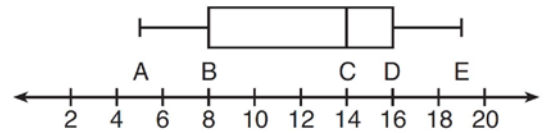
- 1) The second quartile is 600.
  - 2) The mean of the attendance is 400.
  - 3) The range of the attendance is 300 to 600.
  - 4) Twenty-five percent of the attendance is between 300 and 400.
- 11 The box-and-whisker plot below represents the results of tests scores in a math class.



What do the scores 65, 85, and 100 represent?

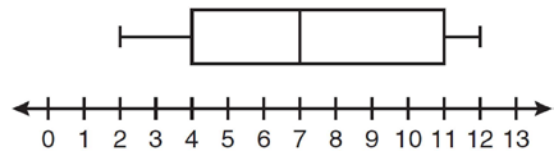
- 1)  $Q_1$ , median,  $Q_3$
- 2)  $Q_1$ ,  $Q_3$ , maximum
- 3) median,  $Q_1$ , maximum
- 4) minimum, median, maximum

- 12 The box-and-whisker plot shown below represents the number of magazine subscriptions sold by members of a club.



Which statistical measures do points  $B$ ,  $D$ , and  $E$  represent, respectively?

- 1) minimum, median, maximum
  - 2) first quartile, median, third quartile
  - 3) first quartile, third quartile, maximum
  - 4) median, third quartile, maximum
- 13 Based on the box-and-whisker plot below, which statement is *false*?



- 1) The median is 7.
- 2) The range is 12.
- 3) The first quartile is 4.
- 4) The third quartile is 11.

**A.S.6: Box-and-Whisker Plots 1: Understand how the five statistical summary (minimum, maximum, and the three quartiles) is used to construct a box-and-whisker plot**

**Answer Section**

1 ANS: 2 REF: 011512ia

2 ANS: 3

The value of the third quartile is the last vertical line of the box.

REF: 080818ia

3 ANS: 3

The value of the upper quartile is the last vertical line of the box.

REF: 060915ia

4 ANS: 3

The median score is the vertical line in the center of the box.

REF: 010301a

5 ANS: 2

The median score is the vertical line in the center of the box.

REF: 060610a

6 ANS: 1 REF: 011001ia

7 ANS: 3 REF: 011220ia

8 ANS: 4 REF: 081312ia

9 ANS: 3

$$75 - 15 = 60$$

REF: 011113ia

10 ANS: 4 REF: 010929ia

11 ANS: 2 REF: 061314ia

12 ANS: 3 REF: 011408ia

13 ANS: 2 REF: 081106ia