Exam

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Find the mean for the following data set: 1) _____

      15   31   34   20   26
  A) 26   B) 7.0   C) 25.2   D) 19

2) Find the median for the following data set: 2) _____

      13   23   11   26   22   18
  A) 5.4   B) 15   C) 18.8   D) 20

3) Use the given frequency distribution to approximate the mean. 3) _____

Class	Frequency
0 – 19	19
20 – 39	17
40 – 59	12
60 – 79	12
80 – 99	19

  A) 30.2   B) 15.8   C) 48.7   D) 30.4

4) Following are heights, in inches, for a sample of college basketball players. 4) _____

78	83	82	78	78	80	81	79	79	83
77	78	84	82	80	80	82	84	78	80

  Find the mean height of the basketball players.
  A) 4.6 inches   B) 80.3 inches   C) 70 inches   D) 80.5 inches

5) Find the sample variance for the following data set: 5) _____

   23 14 32 29 17

  A) 18   B) 58.5   C) 46.8   D) 7.6

6) Find the population standard deviation for the following data set: 6) _____

    36 16 31 17 24

    A) 60.6   B) 75.7   C) 7.8   D) 8.7

7) Approximate the sample variance given the following frequency distribution.   7) _____

Class	Frequency
0 - 9	10
10 - 19	17
20 - 29	12
30 - 39	14
40 - 49	11

    A) 13.5   B) 182.5   C) 179.7   D) 13.4

8) A population has a mean $\mu = 46$ and standard deviation $\sigma = 15$. Find the z-score for a   8) _____
population value of 13.
    A) -0.5   B) -2.2   C) -33   D) 0.9

9) For the data set below, find the first quartile.   9) _____

    72 79 62 76 77 60 65 75 76 67 67

    A) 76   B) 60   C) 65   D) 48.5

10) For the data set below, find the IQR.   10) _____

    71 69 62 79 64 79 63 66 72 74 65

    A) 74   B) 64   C) 17   D) 10

11) For the data set below, find the 37th percentile.   11) _____

    64 95 74 70 32
    58 24 46 25 17
    59 51   7 60 36
    67 67 54 33 60

    A) 46   B) 36   C) 48.5   D) 37

12) A soft-drink bottling company fills and ships soda in plastic bottles with a target volume of 354 milliliters. The filling machinery does not deliver a perfectly consistent volume of liquid to each bottle, and the three quartiles for the fill volume are $Q_1 = 351$, $Q_2 = 357$, and $Q_3 = 360$.
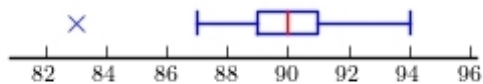
Find the IQR.
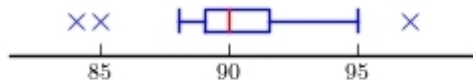   A) 13.5   B) 10.8   C) 3   D) 9

13) Construct a boxplot for the data set below.

95	95	95	97	90
89	90	85	91	84
89	91	92	89	89
89	88	89	91	90

A)

B)

C)

D)
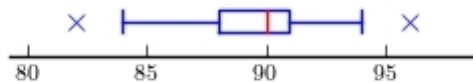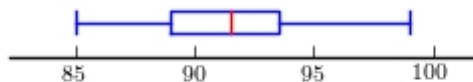
1) C
2) D
3) C
4) B
5) B
6) C
7) B
8) B
9) C
10) D
11) A
12) D
13) B