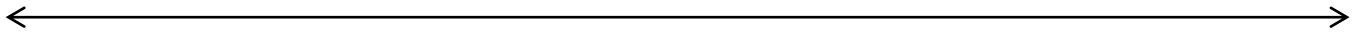1. The following data represents the number of errors in Mr. Brust's packets.

    { 3, 3, 4, 5, 7, 7, 7, 9, 10, 11, 13, 13, 13, 15, 15, 17, 17, 18, 20, 22 }

    a. Find the 5-number summary and create a boxplot of the number of errors. Be sure to label the axis.

    b. Describe the shape of the distribution of Brust's errors.

2. Use boxplot to answer the questions.

    Number of eggs laid

    a. What is the interquartile range?

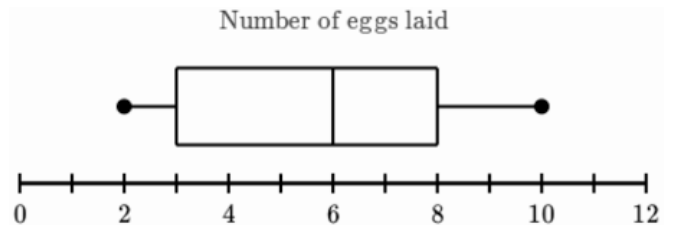   b. What is the minimum value?

    c. The bottom 50% of eggs laid lay between which two numbers?

    d. The top 75% of eggs laid lay between which two numbers?
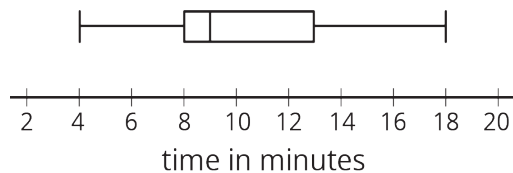
    e. The bottom 75% of eggs laid lay between which two numbers?

    f. The middle 50% of eggs laid lay between which two numbers?   g. What is the third quartile?

3 Circle the data sets that DO NOT match the boxplot.

time in minutes

a. {4, 8, 10, 12, 13, 17, 19}

b. {4, 7, 9, 9, 11, 11, 14, 18}

c. {4, 8, 9, 9, 13, 18}

d. {4, 4, 8, 8, 10, 12, 14, 18}

e. {4, 8, 8, 9, 12, 13, 18}

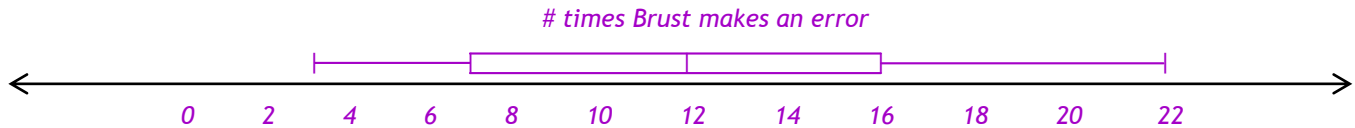1. The following data represents the number of errors in Mr. Brust's packets.

{ 3, 3, 4, 5, 7, 7, 7, 9, 10, 11, 13, 13, 13, 15, 15, 17, 17, 18, 20, 22 }

a. Find the 5-number summary and create a boxplot of the number of errors. Be sure to label the axis.

IQR : min = 3, Q1 = 7, median = 12, Q3 = 16, max = 22   *IQR = 16 - 7 = 9*

 # times Brust makes an error

```
        0   2   4   6   8   10  12  14  16  18  20  22
```

b. Describe the shape of the distribution of Brust's errors.

The graph is symmetric because it has about the same number of values on each side of the median.

2. Use boxplot to answer the questions.

Number of eggs laid

```
  0   2   4   6   8   10  12
```

a. What is the interquartile range? *IQR = 5*

b. What is the minimum value? *min = 2*

c. The bottom 50% of eggs laid lay between which two numbers? *50% of the eggs laid lay between 2 and 6*

d. The top 75% of eggs laid lay between which two numbers?
The top 75% of eggs laid are between 3 and 10

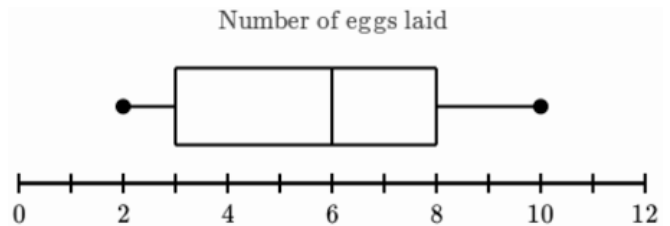e. The bottom 75% of eggs laid lay between which two numbers?
The bottom 75% of eggs laid are between 2 and 8

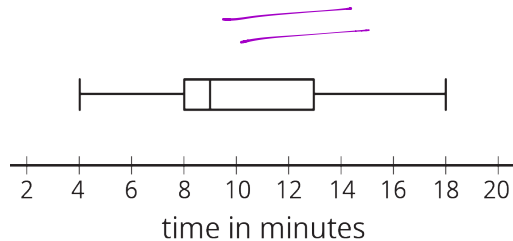f. The middle 50% of eggs laid lay between which two numbers?

The middle 50% of eggs laid lay between 3 and 8

g. What is the third quartile?

Q3 = 8

3 Circle the data sets that DO NOT match the boxplot.

```
  2   4   6   8   10  12  14  16  18  20
        time in minutes
```

a. {4, 8, 10, 12, 13, 17, 19} *Med = 12... nope!*

b. {4, 7, 9, 9, 11, 11, 14, 18} *Med = 10...nope!*

c. {4, 8, 9, 9, 13, 18}

d. {4, 4, 8, 8, 10, 12, 14, 18} *Q1 = 6...nope!*

e. {4, 8, 8, 9, 12, 13, 18}