Name: _____

Statistics Day #3 HOMEWORK # _____ Date: _____

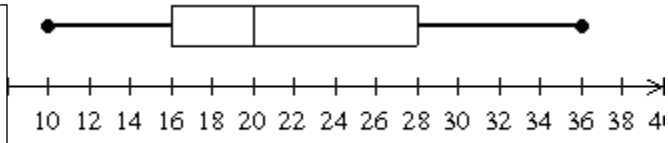
Boxplots & Percentiles

Reading Box Plots:

1. Find the following values given the box plot to the right.

5-Number Summary:
Min =
Q_1 =
Med =
Q_3 =
Max =

Range =
IQR =
IQR*1.5=
Fences:
$Q_1 - 1.5(IQR) =$
$Q_3 + 1.5(IQR) =$
Note: The fences don't fit on graph



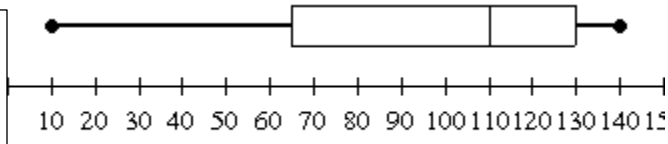
Does this data have any outliers? _____

---

2. Find the following values given the box plot to the right.

5-Number Summary:
Min =
Q_1 =
Med =
Q_3 =
Max =

Range =
IQR =
IQR*1.5=
Fences:
$Q_1 - 1.5(IQR) =$
$Q_3 + 1.5(IQR) =$
Note: The fences don't fit on graph



Does this data set have any outliers? _____

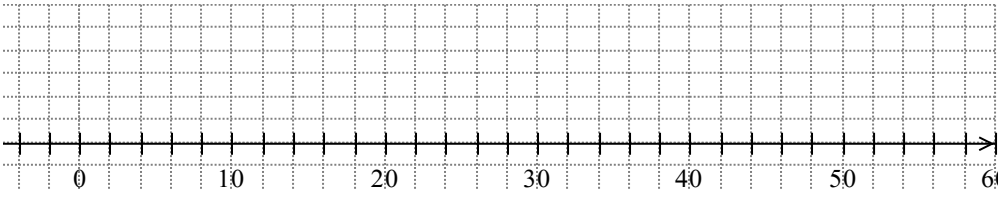
Making A Box Plot: Color Code your data set to correspond to your box plot.

3. The ages of 12 fast-food workers are given in the data set:
   (a) Calculate the Five Number Summary.
   (b) Create a box-and-whisker diagram (boxplot) of this data
   (c) Label the fences on your diagram and determine if the data sets have any outliers?
   (d) Label the mean on your diagram with a colored dotted line.

17, 18, 18, 19, 20, 21, 22, 23, 25, 25, 34, 47

5-Number Summary:
Min =
Q_1 =
Med =
Q_3 =
Max =

Range =
IQR =
IQR*1.5=
Fences:
$Q_1 - 1.5(IQR) =$
$Q_3 + 1.5(IQR) =$
Outlier = _____
Mean: _____



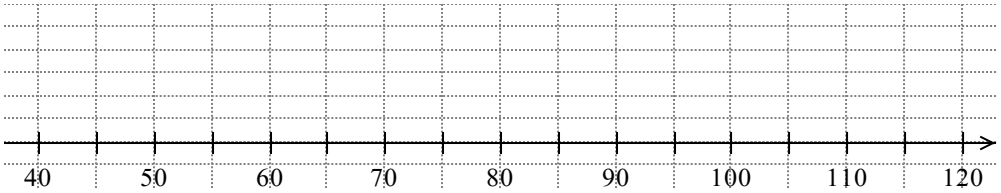
Remember to color code your data set to correspond with the box plot colors.

4. Mr. Daly gives a math test and records the grades of his 17 students as follows:
   (a) Calculate the Five Number Summary.
   (b) Create a box-and-whisker diagram (boxplot) of this data
   (c) Label the fences on your diagram and determine if the data sets have any outliers?
   (d) Label the mean on your diagram with a colored dotted line.

67, 72, 74, 74, 78, 80, 80, 82, 85, 85, 86, 87, 90, 92, 92, 95, 98

5-Number Summary:
Min =
Q_1 =
Med =
Q_3 =
Max =

Range =
IQR =
IQR*1.5=
Fences:
$Q_1 - 1.5(IQR)$ =
$Q_3 + 1.5(IQR)$ =
Outlier = _____
Mean: _____



5. Explain in one sentence why the mean for this data set is approximately 12.