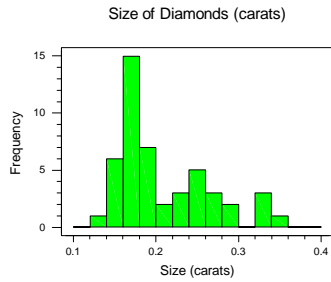


Stat 101: Lecture 7

Size of Diamonds



1

Five Number Summary

Maximum	0.35
Q_3	0.25
Median	0.18
Q_1	0.16
Minimum	0.12

2

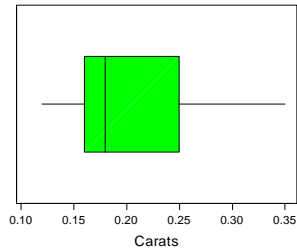
Box Plots

- Establish an axis with a scale.
- Draw a box that extends from the first to the third quartile.
- Draw a line from the first quartile to the minimum and another line from the third quartile to the maximum.

3

Stat 101: Lecture 7

Box Plot



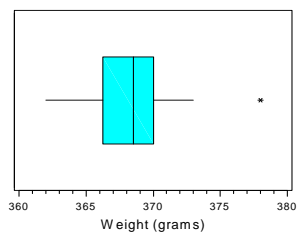
4

Outlier Box Plots

- Establishes boundaries on what are “usual” values based on the width of the box.
- Values outside the boundaries are flagged as potential outliers.

5

Contents of Regular Cola



6

Stat 101: Lecture 7

Comparing Distributions

- How do the distributions compare in terms of
 - Shape?
 - Center?
 - Spread?

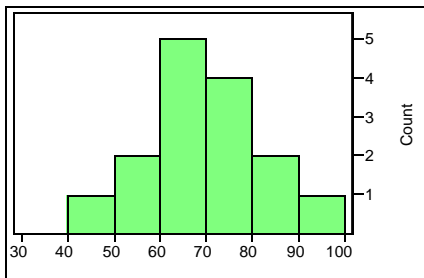
7

Workout Times

- Who? ISU students.
- What? Time spent working out (minutes), Gender
 - When? 1998.
 - Where? Second floor of Leid Recreation facility.
 - How? The time was noted when a student arrived at the 2nd floor workout area and when that student left.

8

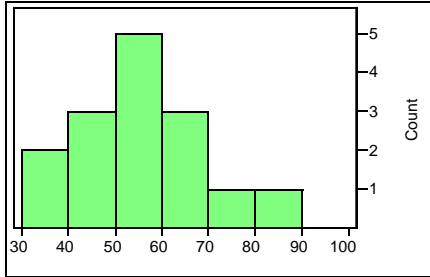
Workout Times: Men



9

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Workout Times: Women



10

Work Out Times (min)

Group	Mean	Std Dev	Median	IQR
Men	55.9	13.53	54	16
Women	69.2	13.79	69	15

11

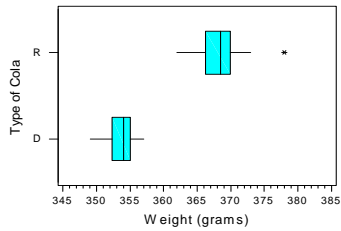
Comparing Groups

- Regular
 - Min: 362 g
 - Q_L: 366.5 g
 - Med: 368.5 g
 - Q_U: 370 g
 - Max: 378 g
- Diet
 - Min: 349 g
 - Q_L: 352.5 g
 - Med: 354 g
 - Q_U: 355 g
 - Max: 357 g

12

Stat 101: Lecture 7

Comparing Groups



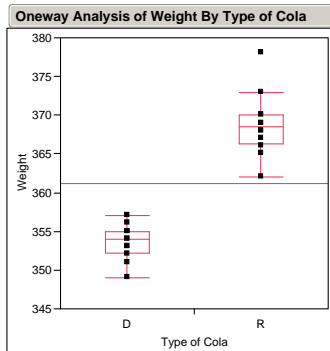
13

Comparing Groups

- Compare shape.
- Compare center.
- Compare spread.
- Compare outliers, if there are any.

14

Comparing Groups



15
