

Exam 1 Review TTh

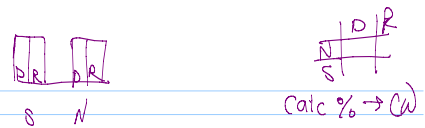
Note Title 9/23/2010

Bring:
 * 8.5" x 11", 1 side sheet of notes
 * 4 function calculator

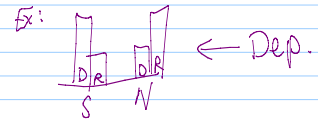
C2 C, Q
 W's: case, variables, why

C3 Cat. Vars.

	Graph	Summarize
one var (C)	Bar Chart Discuss: Most Frequent	Frequency = count Rel. Freq = %
Two Var (C)	Side-by-Side Bar Chart * use % in outermost cat.	Contingency Table



Disc: Independence
 Two variables are ind. if distrib. of one is the same across all categories of the other.



C4, 5 Q

1 Q

Graph	Summarize
Hist/Box Discuss: Shape both - skew/sym/unif H - modes B/H - outliers/gaps	Spread Center IQR med SD mean resistant to outliers

Notes:
 ① IQR = $Q_3 - Q_1$
 ② Know parts of boxplot
 ③ Q_1 = value w/ 25% of data below

1 Q, 1 C

Side-by-Side Hist/Box → use % w/in category Discuss: compare shape	Compare Centers Spreads
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C6 z-score = $\frac{y - \bar{y}}{s} = \# \text{ of SD's away from mean}$
 s = standardized result
 * used to compare values from diff. dist.
 mean(z) = 0 SD(z) = 1

Shift = add/subt on each value	Shape?	center?	Spread
rescale = mult/div " " "	NO	YES	NO
	NO	YES	YES

Normal Model



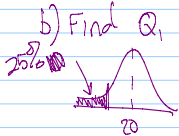
μ = mean
 σ = SD



Ex: Data \approx normal, mean = 20, SD = 3.

a) What % of data is above 17?

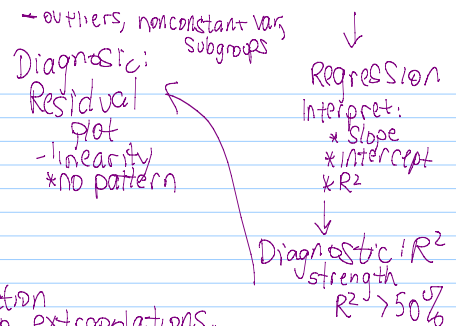
Diagram
 ① Label mean
 ② Shade region



C7, 9

2 Q

Graph	Summarize
Scatter plot. Discuss: - form: lin, non, no pattern - pos/neg - strength: weak, strong	r = correlation coeff. if linear



Notes: ① Prediction
 - no extrapolations.

② Residual = observed - predicted

Essay: ① Stick to what you know.

② ALWAYS comment on Minitab output