Stats Support 2: Lectures 2 and 3
Practice questions

*These practice questions will be taken up in **Stats Support** on Wed, January. 23rd and Fri, January 25th – remember you do not need to complete the questions to attend this portion of stats support*

1. Nurses across hospitals were asked what specific resource shortages were affecting patient care most negatively. The results are summarized in the frequency table below:

Table 1. Most important resources shortages in hospitals according to a random sample of Nurses		
Shortages	*f*	*%*
Patient Beds/Places	479	
Medical and medical support staff	567	
Non-medical support staff	232	
Other	69	
Total	1347	

What level of measurement is the variable in this table?
Add percentages to the table.
What are the mode and variation ratio here?
In a sentence or two, what do the percentages and summary statistics tell us about what nurses think in this context?

2. Below we have raw data recording the annual household income (expressed in thousands) of people participating in an 'adventure living' club for seniors (people aged 65 or greater).

case	Income
a	51
b	73
c	40
d	14
e	124
f	89
g	76
h	24
i	69
j	66

q's on next page

What is the level of measurement of this variable?
What is the range and interquartile range here?
In a sentence, summarize what these measures tell us about the income experience of seniors in this social club?
What is the mean and median here? What does this add to our summary of these incomes?
Use the mean to calculate the standard deviation and say what it means in a sentence.

3. We created a 'happiness scale' out of various attitude and emotion questions on a survey administered to 560 auto workers in a large auto-factory in Ontario. The scale ranges from 0 - 50 (50 would be perfect happiness) and had a mean of 32.67 and a standard deviation of 5.7.
What is the level of measurement of this variable?
Interpret these results in a sentence. Are auto workers generally happy?
What percentage of workers would be estimated to score above 40?
What percentage of workers would be estimated to score below 20?
*What are the steps we need to provide on written assignments and on exams when we create estimates using the normal curve?

We will do more practice with the normal curve next week.