Name:_____   Math 130 Day 11.5 Lecture Worksheet

Date: The Normal Approximation to Binomial Random Variables

Ex 1: **On-Time Flights** According to American Airlines, their flights are on time 90% of the time. If 150 American Airlines' flights are randomly selected,

a) What is the probability that exactly 130 flights are on time?

b) What is the probability that at least 130 flights are on time?

c) What is the probability that more than 130 flights are on time?

d) What is the probability that fewer than 125 flights are on time?

e) What is the probability that at most 125 flights are on time?

f) What is the probability that between 125 and 135 flights, inclusive, are on time?

g) What is the probability that between 125 and 135 flights, exclusive, are on time?

h) What is the probability that between 125 and 135 flights, including 125 and not including 135, are on time?