

ECE 341 - Homework #10

Testing with Normal Distributions. Due Thursday, June 3rd

Please make the subject "ECE 341 HW#10" if submitting homework electronically to Jacob_Glower@yahoo.com (or on blackboard)

The high and low for the month has been measured at Hector Airport since 1942. The mean and standard deviations are:

Month	May	June	July	Aug	Sept	Oct
Mean	87.88	91.88	94.64	94.6	89.56	79.46
st dev	4.57	4.41	4.02	4.62	5.66	6.82

Monthly Highs (degrees F): http://www.bisonacademy.com/ECE111/Code/Fargo_Weather_Monthly_High.txt

Month	May	June	July	Aug	Sept	Oct
Mean	27.35	40.34	46.36	43.3	30.54	19.1
st dev	4.41	4.11	3.97	4.16	4.77	5.53

Monthly Lows (degrees F)

Highs:

- 1) What is the **90%** confidence interval for the high in June?
- 2) What is the probability that it will break 100F in June?
- ~~3) What is the probability that the high in June will be more than the high in July? skip~~

Lows:

- 4) What is the **99%** confidence interval for the low in June?
- 5) What is the probability that it get colder than 32F in June?
- ~~6) What is the probability that the low in July will be colder than the low in June? skip~~