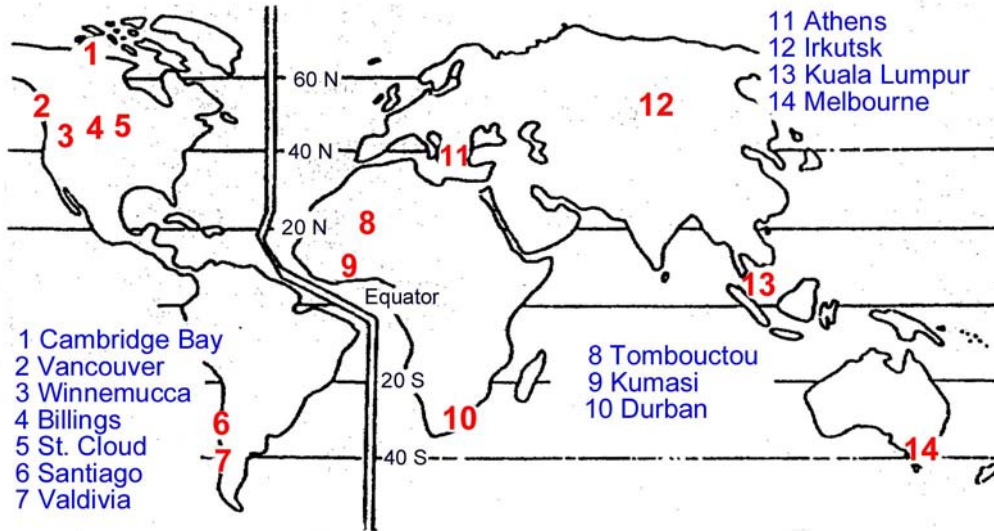


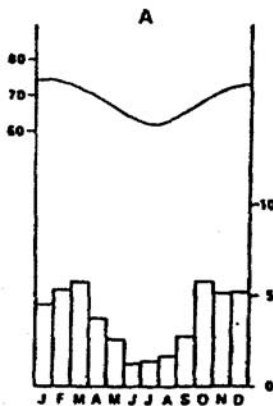
Name \_\_\_\_\_

### GEOG 531 EXERCISE #3 CLIMATES & CLIMOGRAPHS

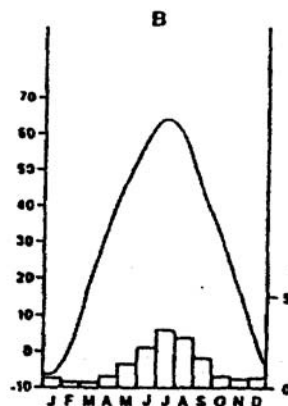
Answer the questions about climographs A through N below. All climographs represent 30-year monthly means of temperature (° F) and precipitation (inches). In each case, express the temperature and precipitation regime in terms of global pressure and wind systems and the continental position of the station. Below is a very rough location map for the stations, but you may also want to refer to an atlas for the exact location.



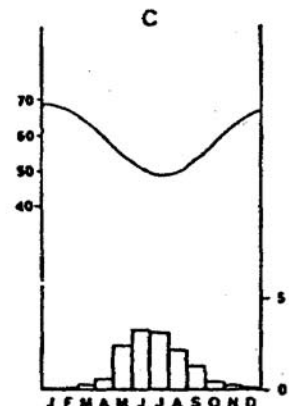
1. Match these three climographs (A, B and C) with the proper cities: Durban, South Africa; Santiago, Chile; and Irkutsk, Russia:



City: \_\_\_\_\_



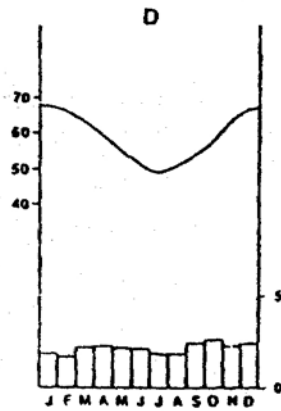
City: \_\_\_\_\_



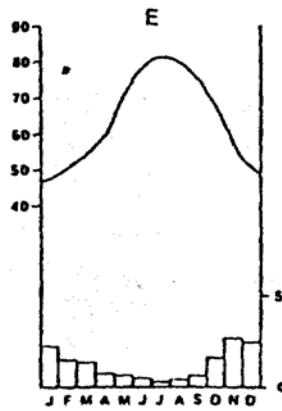
City: \_\_\_\_\_

Where in the United States would you expect to find climates similar to that in graph A?

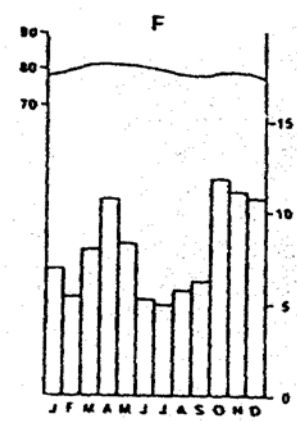
2. Match climographs D, E, and F with the proper cities:: Kuala Lumpur, Malaysia; Athens, Greece; and Melbourne, Australia.



City: \_\_\_\_\_



City: \_\_\_\_\_

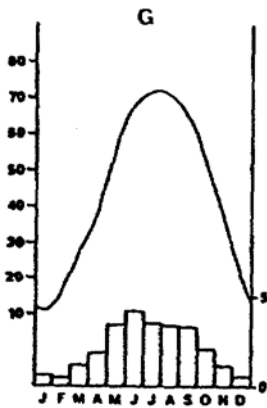


City: \_\_\_\_\_

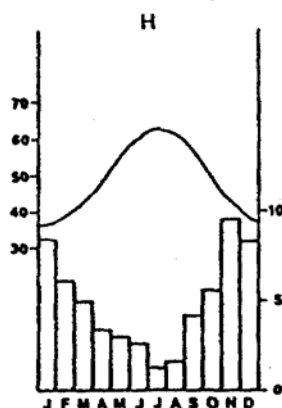
Which of the three (D, E or F) represents a tropical wet climate?

Which of the three (D, E or F) represents the same climate as graph C? How and why is it slightly different from the climate of graph C?

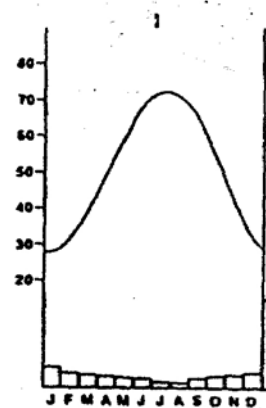
3. Match the climographs G, H and I with the proper cities: Vancouver, B.C. Canada; St. Cloud, Minnesota, (US); Winemucca, Nevada. (US)



City: \_\_\_\_\_



City: \_\_\_\_\_



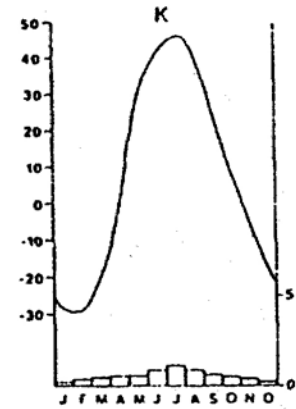
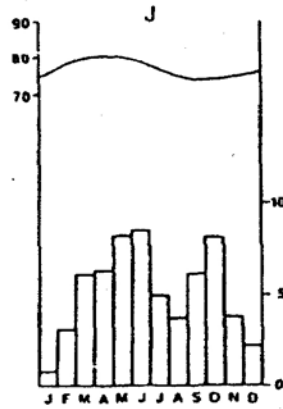
City: \_\_\_\_\_

How does precipitation regime alone distinguish the climate differences between G and H (i.e. how do the source, timing, season, characteristics, etc. of the precipitation ) differentiate the two climates?)

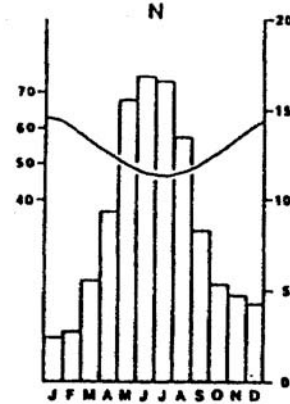
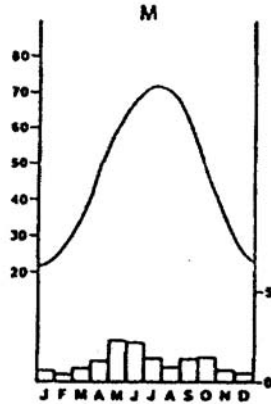
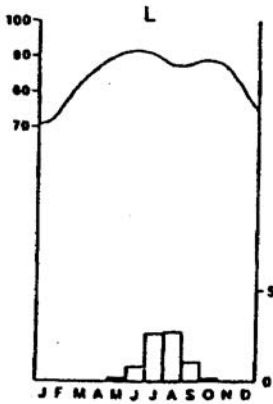
How does the precipitation seasonality of City I reflect its location?

4. Match climographs J, K, L, M and N with the proper cities:

- Valdivia, Chile;
- Kumasi, Ghana;
- Tombouctou, Mali;
- Billings, Montana, (US);
- Cambridge Bay, N.W.T., Canada



City: \_\_\_\_\_ City: \_\_\_\_\_



City: \_\_\_\_\_

City: \_\_\_\_\_

City: \_\_\_\_\_

Compare the causes of precipitation at City L with those at City I.

Of the cities A through M, which represents the climate most similar to that of N?

What is the cause of the double precipitation maxima at City J?

Why do you suppose City K is much drier than City B?

5. Now to familiarize yourself with the different classifications, go back and assign a Climate Zone # code (from the Hypothetical Continent handout), a Koeppen Climate code (Af, Cs, etc.), and a Trewartha climate code (Ar, Do, etc.) to each climograph / city A through N.

Climograph / City	Climate Zone #	Koeppen Code	Trewartha Code
A			
B			
C			
D			
E			
F			
G			
H			
I			
J			
K			
L			
M			
N			

6. Finally, for each climograph/city write up a short *process-based explanation* for the mean monthly temperature and precipitation regimes depicted by the climographs. Include items such as the source and nature of the precipitation (e.g. extratropical cyclones in winter synoptic events, tropical convective showers associated with the ITCZ, etc.) and the temperature (high annual range due to continental location, cloud-free and hot due to subsidence in subtropical high, etc.)

Climograph / City	Process-Based Explanation of Climate
A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	
M	
N	