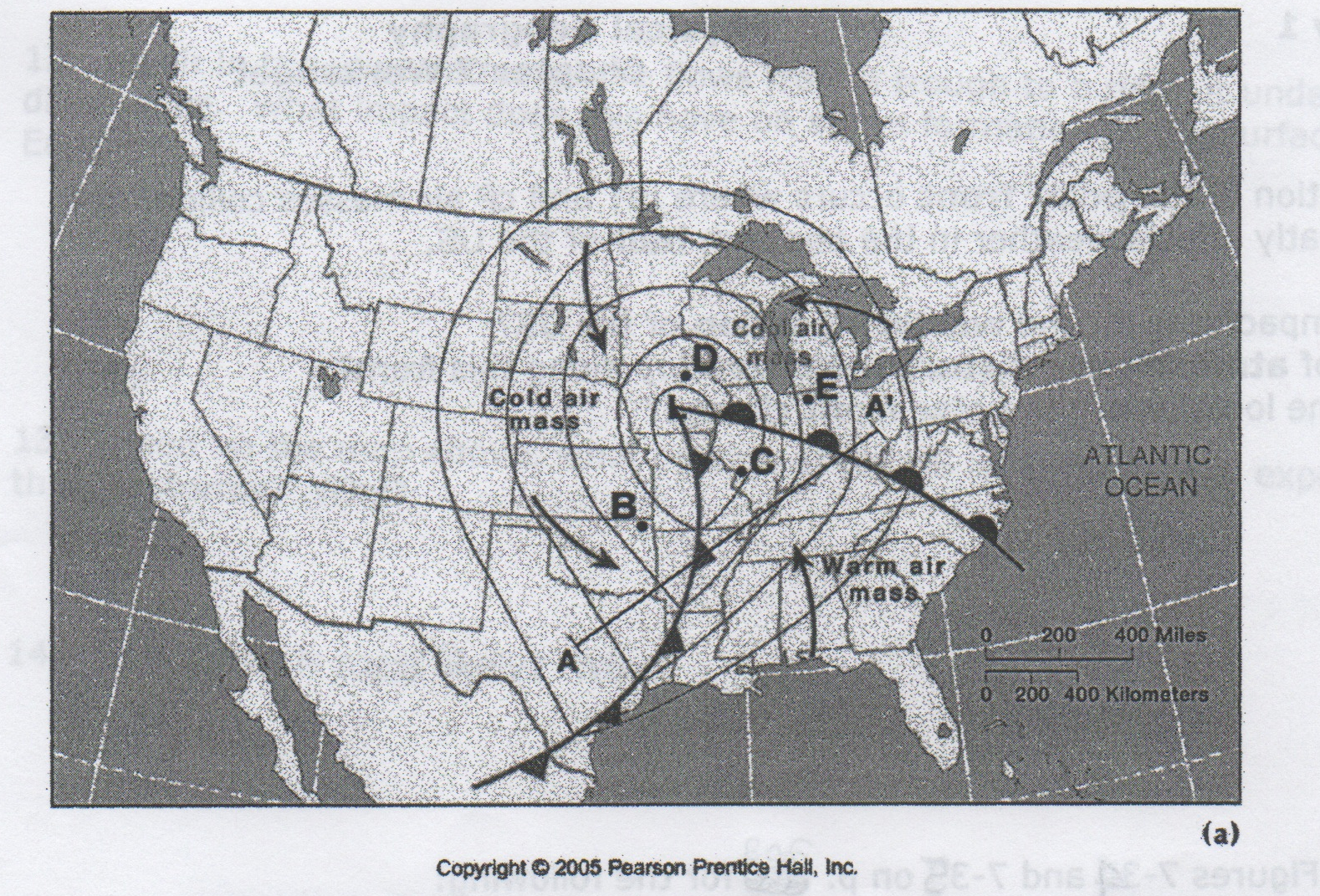
**Homework: Chapter 6**

**20 points**

Midlatitude Cyclone and Fronts, p. 165-170.

Refer to the midlatitude cyclone diagramed below for the following questions:



Key: City B = Tulsa, Oklahoma

City C = St. Louis, Missouri

City D = Des Moines, Iowa

City E = Detroit, Michigan

1. Which city (of the four listed) is receiving **the greatest total rainfall** for the next day and a half? Explain your answer.

2. What city is most likely going to receive thunderstorms in the next 12 hours? Why?

3. Which of the following would describe the expected weather for Detroit over the next 12 hours:

a. thunderstorms followed by cool weather & low humidity

b. steady rainfall followed by warmer weather & high humidity

c. clear skies followed by rain showers and falling temperatures

d. severe weather, such as thunderstorms, followed by clearing and cooler temperatures

4. The area experiencing the heaviest (most intense) rainfall currently is:

a. Central Missouri

b. West Texas

c. Washington D.C.

d. Michigan

5. What part of the United States would expect to be experiencing an **anticyclone**? Why?

6. Where are skies the clearest: Texas, Georgia, Wyoming or North Carolina? Why?

7. You are experiencing an **occluded front** at your location.

a.) Are there any warm conditions? Why or why not?

b.) Is there any rainfall? If so, describe its intensity and duration.

Thunderstorms and Tornadoes, p. 181-186.

Refer **to Figure 6.23 p. 186** to answer the following questions.

8. Why do 90% of the world’s tornadoes occur in the U.S.?

9. In what area of the U.S. do these tornadoes occur and why?

10. What time of year are tornadoes most likely to occur and why?