

**TIME = LONGITUDE REVIEW**

- 1) What movement of the earth is time based upon?

Rotation

- 2) How many degrees does the earth do this per hour?

15°

- 3) How many degrees of longitude separate different time zones as a result?

15°

- 4) What is the Sun's role in affecting our time?

NOTHING

- 5) Why can a person on Long Island and a person in Cuba have the same exact time even though they are 1400 miles apart?

same line of longitude, same time zone.

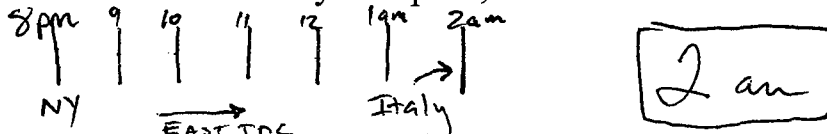
- 6) If two locations are 3 hours apart in time, what is their longitude difference?

$$3 \times 15^\circ/\text{hr} = 45^\circ$$

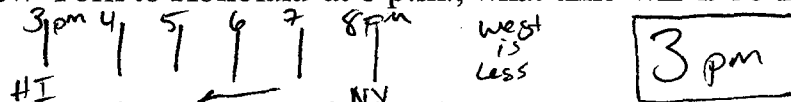
- 7) If two locations are 90 degrees apart in longitude, what is their time difference?

$$90 / 15 = 6 \text{ hrs}$$

- 8) Italy and New York are 6 time zones apart. If you make a phone call from New York to Italy at 8 p.m., what time will it be there?



- 9) Hawaii and New York are 5 time zones apart. If you make a phone call from New York to Honolulu at 8 p.m., what time will it be there?



- 10) Why can you be eating pancakes for breakfast in New York at the exact same moment while people in China are eating ice cream for dessert?

$$180^\circ \text{ apart} = 12 \text{ hrs}$$

8 am = 8 pm  
NY China