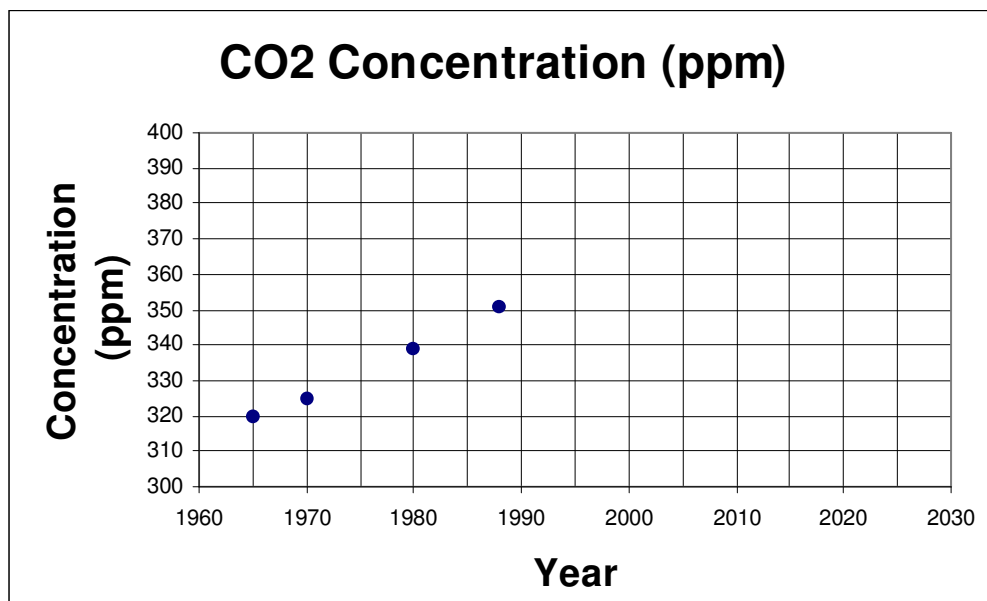


Carbon Dioxide Concentration in the Atmosphere

The table and graph below show the levels of CO₂ concentration, in parts per million, for several years in the past as measured at the Mauna Loa Observatory in Hawaii. Sketch a trend line on the graph and develop a linear model relating the CO₂ concentration to the number of years since 1965. Respond to the questions below.

Year	Years Since 1965	CO ₂ (ppm)	Year Change	(ppm) Change	Rate of Change	Model Prediction	Error
Y	t	C					
1965		320					
1970		325					
1980		339					
1988		351					



- How fast is the CO₂ level rising?
- When did the CO₂ level first reach 300 ppm?
- When will the CO₂ level reach 400 ppm?
- Predict the CO₂ level in 2005,