

## Wave numbers for $O_2$ and $N_2$

A. Given the force constants for N<sub>2</sub> and O<sub>2</sub> are 2287 and 1133 N/m, respectively, calculate their vibrational frequencies. B. Calculate the infrared absorption intensity of the v=0  $\rightarrow$  v=1 transition of O<sub>2</sub>.