

$$\tan\theta = \frac{C_6 - C_1}{L}$$

$$E = \frac{W}{5} \left[5G + \frac{A}{2} (C_1 + 2C_2 + 2C_3 + 2C_4 + 2C_5 + C_6) + \frac{B}{6} (C_1^2 + 2C_2^2 + 2C_3^2 + 2C_4^2 + 2C_5^2 + C_6^2 + C_1C_2 + C_2C_3 + C_3C_4 + C_4C_5 + C_5C_6) \right] * (1 + \tan\theta)$$

$$= \frac{W}{5} \left[5G + \frac{A}{2} (C_1 + 2C_2 + 2C_3 + 2C_4 + 2C_5 + C_6) + \frac{B}{6} (C_1^2 + 2C_2^2 + 2C_3^2 + 2C_4^2 + 2C_5^2 + C_6^2 + C_1C_2 + C_2C_3 + C_3C_4 + C_4C_5 + C_5C_6) \right] * \left(1 + \frac{C_6 - C_1}{L} \right)$$

$$E = \frac{1}{2} m v^2 \rightarrow v = \sqrt{\frac{2gE}{W}} \text{ then compare } v \text{ with limit } v_0.$$