

Chapter 4, Question 1:

Aircraft/Engine Performance

To maximize endurance an airplane must be flow in a manner that

- 1) minimizes drag
- 2) maximizes lift
- 3) maximizes lift/drag ratio
- 4) maximizes power available
- 5) minimizes power required
- 6) I don't know

L.O. D

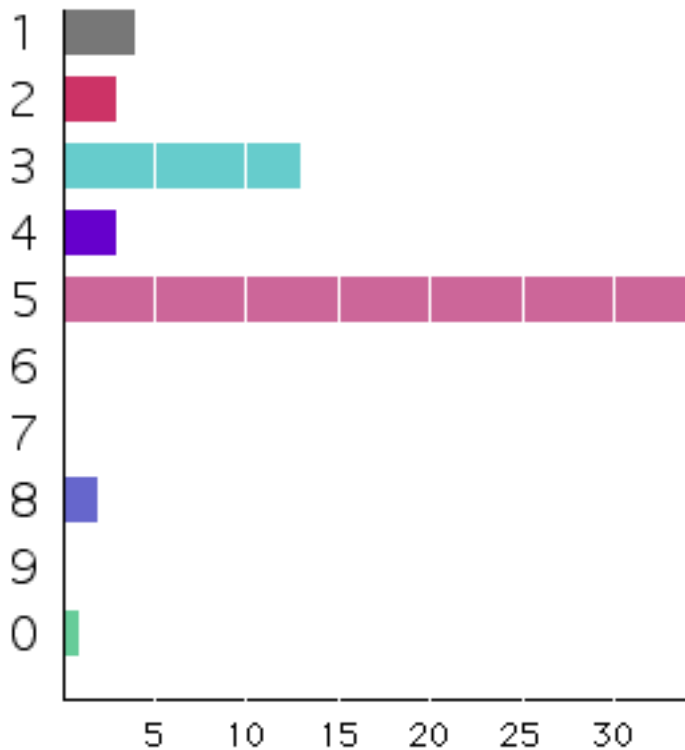
Chapter 4, Question 1 Answer:

The correct answer is 5) Minimizes power required

To maximize time aloft (endurance) for a fixed quantity of energy (the fuel), it is necessary to minimize the rate of energy usage (power required = drag*flight velocity). Note that to maximize range, it is necessary to maximize L/D, or for a given weight, to minimize drag.

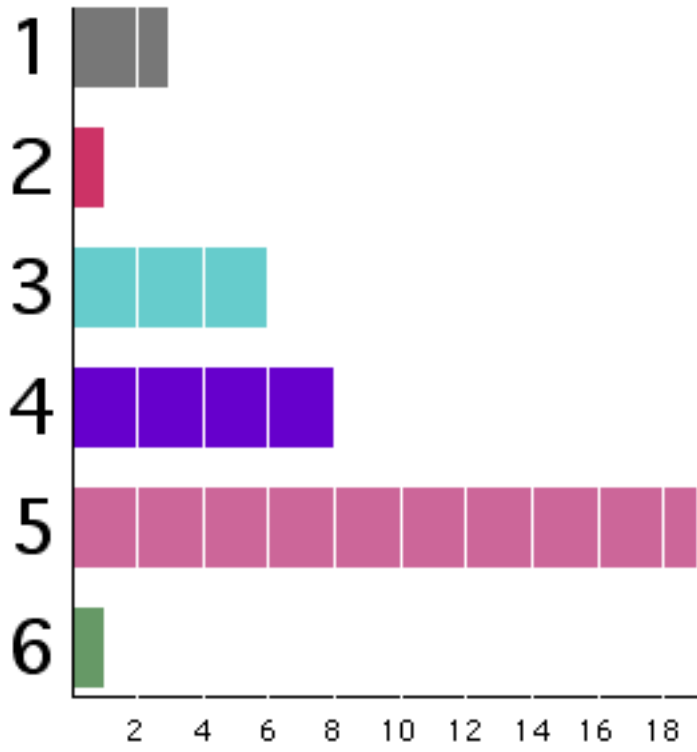
Class performance (2004):

Question 3 : P4Q1 4



Class performance (2003):

Question 2 : Question 2



Class performance (2001):

Question 1 : Question 1

