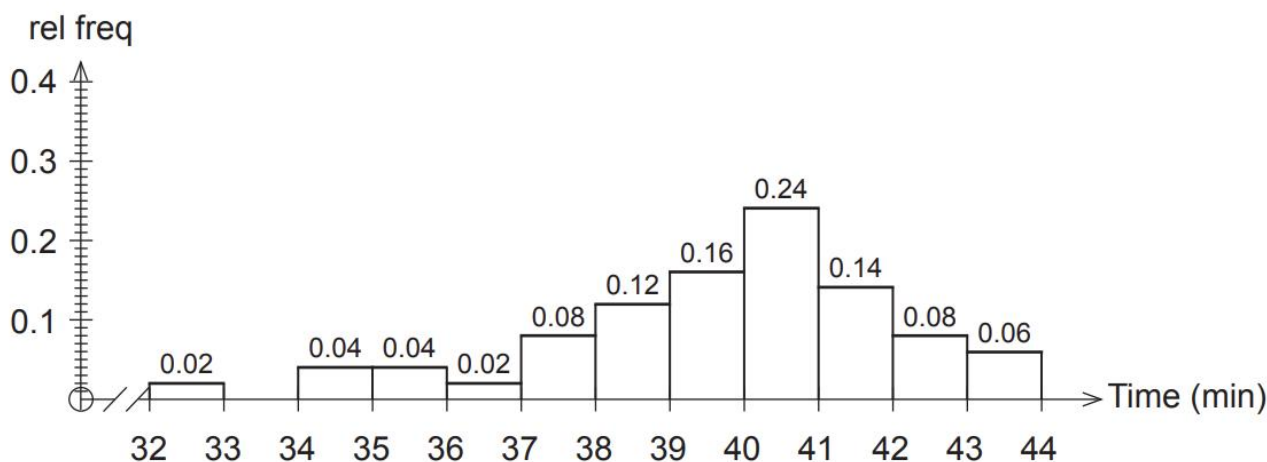


Question 1**(5 marks)**

Anastasia is a university student. She records the time it takes for her to get from home to her campus each day. The histogram of relative frequencies below shows the journey times she recorded.



Use the above data to estimate the probability of her next journey from home to her university campus

(a) taking her less than 36 minutes. (1 mark)

(b) taking at least 35 minutes but no more than 39 minutes. (2 marks)

On three consecutive days, Anastasia needs to be on campus no later than 10 am.

(c) If she leaves her home at 9:22 am each day, use the above data to estimate the probability that she makes it on or before time on all three days. (2 marks)