

2. As part of a statistics project a student recorded the amount of money spent, in £, by each of a random sample of 60 customers at checkout *A* in a supermarket. She also recorded the amount spent by each of a random sample of 60 customers who used another checkout at checkout *B* in the same supermarket. The results are given in the table below.

Amount spent	$\leq £10$	≤ 20	≤ 40	≤ 60	≤ 100
Cumulative Frequency for checkout <i>A</i>	25	41	52	56	60
Cumulative Frequency for checkout <i>B</i>	10	24	45	54	60

- (i) On graph paper, draw the cumulative frequency diagrams on the same diagram. [3]
- (ii) Use your diagram to estimate the median amount spent at
 - a. Checkout *A*,
 - b. Checkout *B*. [3]
- (iii) Use the diagram to estimate the interquartile range of the amount spent at
 - a. Checkout *A*,
 - b. Checkout *B*. [4]
- (iv) One of the two checkouts was an 'express' checkout. Customers are allowed a maximum of nine items when they pass through an express checkout. State, with a reason, which of the two checkouts, *A* or *B*, was more likely to have been the express checkout. [2]
- (v) Calculate an estimate of the mean amount spent at checkout *B*. [4]