Marked example 2

Paper 1 style · No calculator

2 5 marks SL 4.2 ●●○ Typical

The time, t minutes, that 80 students took to finish a puzzle is summarised below.

$t \leq$	10	20	30	40	50	60
cumulative frequency	6	20	44	66	76	80

(a) Find the number of students who took more than 20 minutes and at most 30 minutes. **[1]**

(b) Write down the modal class. **[1]**

(c) Write down the class that contains the median. **[1]**

(d) Find the percentage of the students who took more than 40 minutes. **[2]**

MARKSCHEME (a)

$44 - 20 = 24$ **A1**

Total 1 mark

MARKSCHEME (b)

$20 < t \leq 30$ **A1**

Total 1 mark

Note Frequencies 6, 14, 24, 22, 10, 4.

MARKSCHEME (c)

$20 < t \leq 30$ **A1**

Total 1 mark

Note The 40th and 41st students: $20 < 40 \leq 44$.

MARKSCHEME (d)

$80 - 66 = 14$ **(M1)**

$\frac{14}{80} = 17.5\,\%$ **A1**

Total 2 marks

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