

M4 = 9 days to go!

Think about
common
denominator

$$\frac{5}{6} - \frac{1}{2}$$

$$\frac{5}{12} - \frac{6}{12}$$

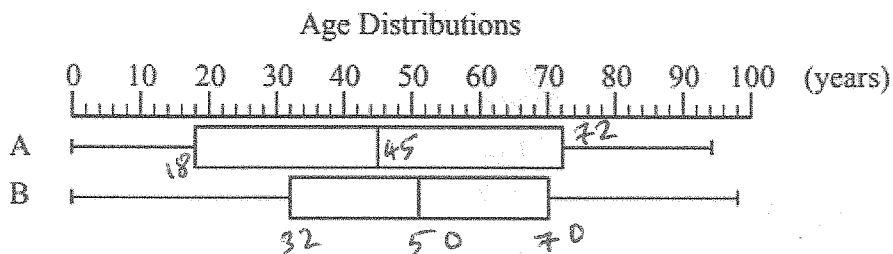
14 Simplify $\frac{5t}{6} - \frac{1}{2}$

$$\frac{5t \times 2}{6 \times 2} - \frac{6 \times t}{6 \times 2}$$

$$\frac{10t}{12} - \frac{6t}{12}$$

Answer $\frac{4t}{12}$ [3]

25 The box plots show the distribution of ages of the people living in two cities, A and B.



(a) In which city is the interquartile range greater? How can you tell this from the diagram?

Answer city A because IQR is $72 - 18 =$
The Box is longer [1]

(b) In which city are people generally older? Explain your answer.

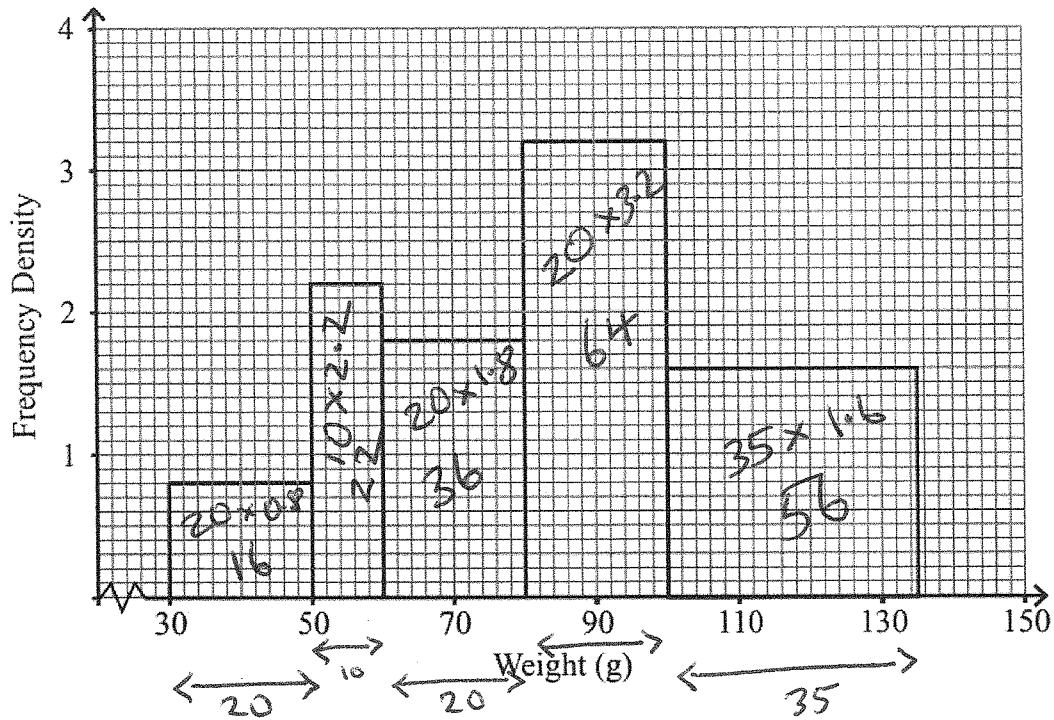
Answer city B because Median for B is
older than the median for A [1]

(c) Complete the sentence

75% of the people in city A are aged over 18 [1]

$$\frac{3}{4}$$

19 The histogram shows the weights (g) of letters passing through a post office sorting machine in a day.



(a) Use the graph to complete the frequency table for this data.

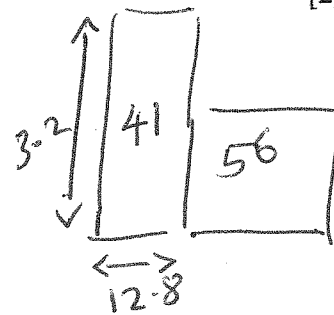
Weight W (g)	freq
$30 \leq W < 50$	16
$50 \leq W < 60$	22
$60 \leq W < 80$	36
$80 \leq W < 100$	64
$100 \leq W < 135$	56

194

[2]

(b) Calculate an estimate of the median weight of the letters.

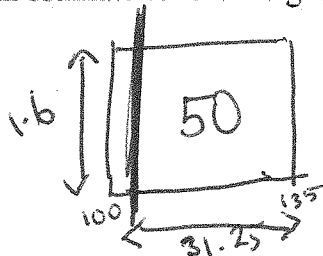
$\frac{1}{2}$ way
 $\frac{1}{2}$ of 194 = 97ⁿ



Answer 87 g [2]

$100 - 12.8$

(c) Calculate an estimate for the weight of the lightest of the heaviest 50 letters.



Answer 103.75 g [3]

104