

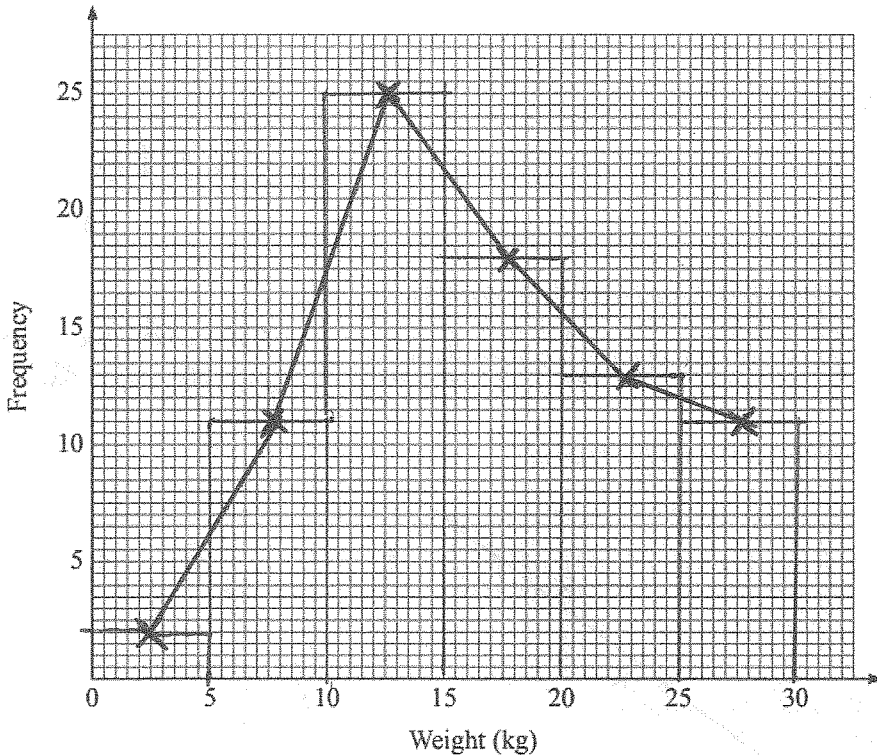
10 The table below shows the weight of suitcases checked in for a flight.

Weight (kg)	Frequency
$0 < w \leq 5$	2
$5 < w \leq 10$	11
$10 < w \leq 15$	25
$15 < w \leq 20$	18
$20 < w \leq 25$	13
$25 < w \leq 30$	11

80

Frequency Polygon  
 Draw a bar chart first then x the top in the middle of the bar Join up with straight line

(a) Draw a frequency polygon for the data.



m3 = 18 days to go!

(b) Which class interval contains the median weight?

80 data values

$\frac{1}{2}$  way. [2]

Where is the 40<sup>th</sup> Answer  $15 < w \leq 20$  [1]

(c) All luggage is charged at £20 per suitcase. A suitcase weighing over 20kg has an additional charge of £7.50

How much money is charged for all the luggage on this flight?

$$0 < w \leq 20 \text{ kg} = 2 + 11 + 25 + 18 = 56$$

$$56 \times \text{£}20 = 1120$$

$$20 < w \leq 30 = 24$$

$$24 \times \text{£}20 = 480$$

$$24 \times 7.50 = 180$$

Answer £ £840 [2]

Nicola is organising a concert to raise money for charity.  
 Entry to the concert is £4.00  
 The number of people attending concert is 800 to the nearest hundred.

What is the greatest possible amount of money she raised for charity?

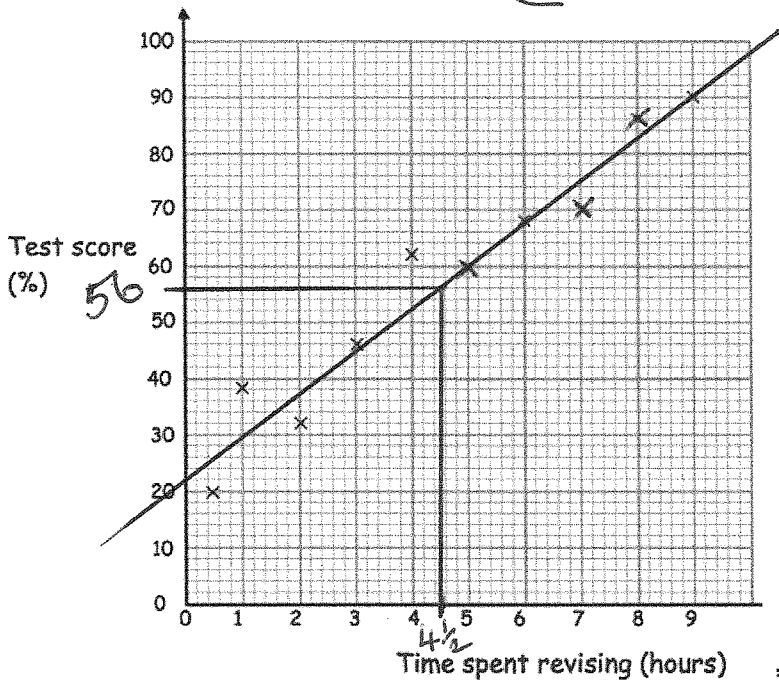
800 nearest 100  
 could be 750 → 849  
 850 will round up  
 so  $849 \times 4$   
 3396  
 £ 3396  
 (3)

2. The table shows the time spent revising and the test scores of ten students.

Time spent revising (hours)	9	0.5	1	4	6	2	3	7	5	8
Test result (%)	90	20	38	62	68	32	46	70	60	86

should be 10 x points on the graph

The first seven points have been plotted on this scatter diagram.



Line of Best fit is a straight line with 1/2 points on each side

- (a) Complete the scatter diagram. (1)
- (b) Describe the relationship shown in the scatter diagram.  
 Positive Correlation which means as hours revising increases then so does the test score. (1)
- (c) Draw a line of best fit on your scatter diagram. (1)
- (d) Another student has spent 4.5 hours revising. Use your line of best fit to estimate their test result.  
 56% (1)