

AQA, OCR, Edexcel

GCSE

GCSE Maths

Sampling, Data and Frequency
Polygons Answers

Name:

M M E

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Total Marks: /12

Sampling, Data and Frequency Polygons

1. A stratified sample of 80 students was taken from the school. Calculate the number of year 7 and year 9 students you would expect in the sample.

(3 Marks)

Year	Number
7	65
8	135
9	150

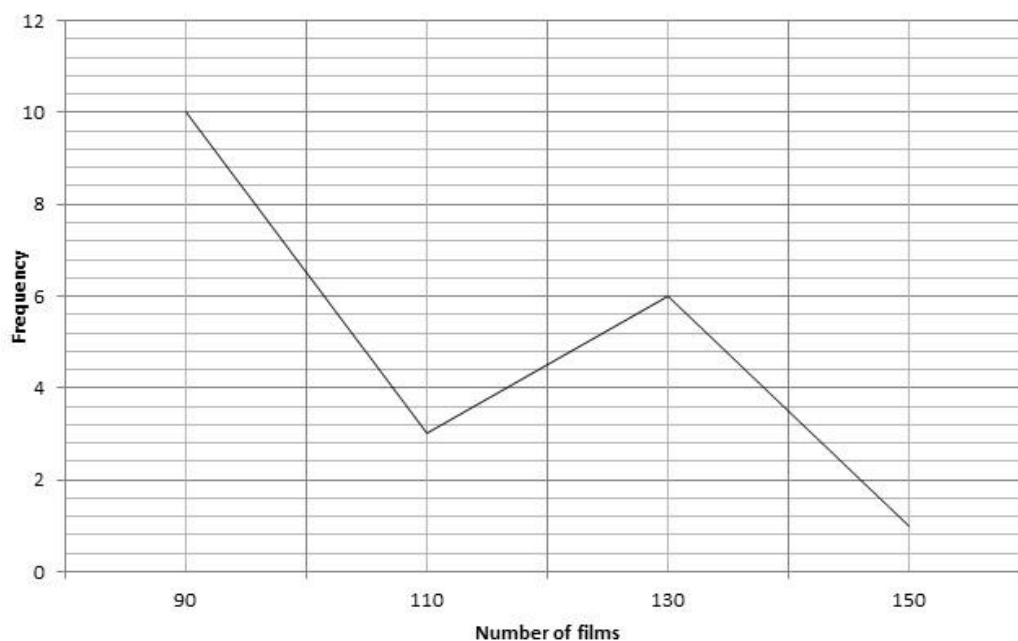
- Year 7 = $\frac{65}{350} \times 80 = 15$
- Year 9 = $\frac{150}{350} \times 80 = 34$

2. The table shows the length of some cinema films.

Length, / (minutes)	Number of films
$80 < / \leq 100$	10
$100 < / \leq 120$	3
$120 < / \leq 140$	6
$140 < / \leq 160$	1

- (a) Use this information to draw a frequency polygon on the graph paper below.

(3 Marks)

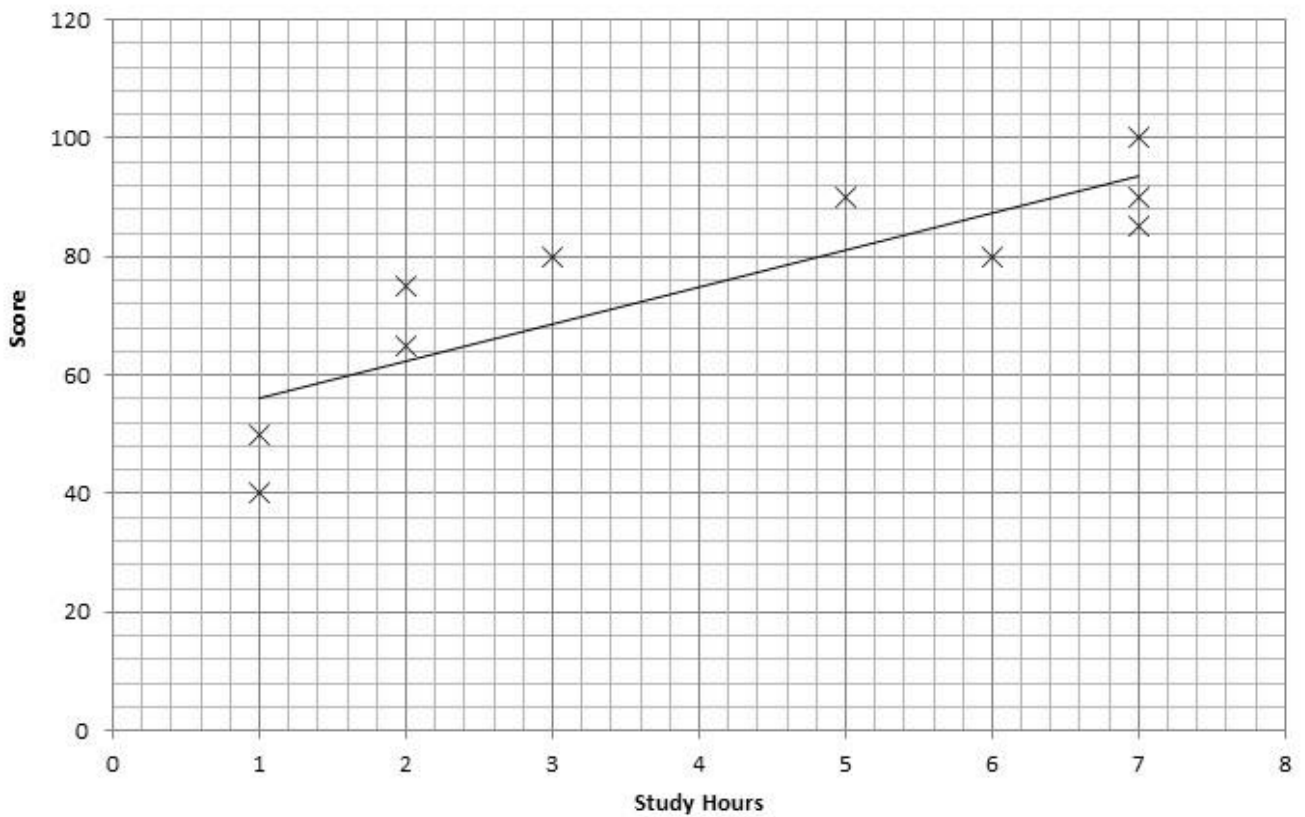


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3. Use the following table to plot a scatter graph below.

(3 marks)

Study Hours	Score
3	80
5	90
2	75
6	80
7	90
1	50
2	65
7	85
1	40
7	100



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a) What type of correlation is there present?

- Positive correlation

(1 Mark)

b) Use the graph to predict what score a student would get if they revised for 4 hours.

- Score = 78 (except anything from 72 – 28)

(2 Marks)