

**Year 8 Level 8 Maths Practice Assessment**

**Name:**

**Class:**

**Date:**

**A Number and the number system**



1. (a) Write  $\frac{7}{15}$  as an exact decimal

.....1 mark (L8/1)



(b) Write 0.12121212..... as a fraction

.....1 mark (L8/1)

**B Calculating**



2. (a) A plot of land is valued at £35,000.  
Over the next three years the value of the plot of land falls by 15% each year.  
What is its value by the end of this three year period?

----- 1 mark (L8/2)

(b) A loaf of bread increases in price by 4% to £1.56.  
What was the cost of the loaf of bread before the price increase?

----- 1 mark (L8/2)

3. (a) (i) Express 0.000043 in standard form



..... 1 mark (L8/3)

(ii) Express  $7 \times 10^4$  as an ordinary number

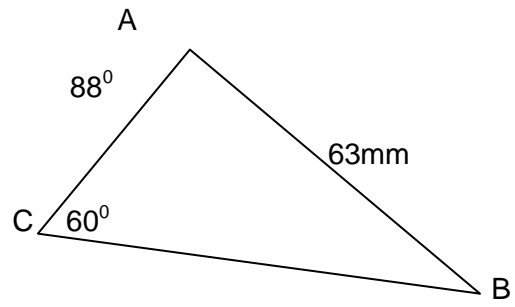
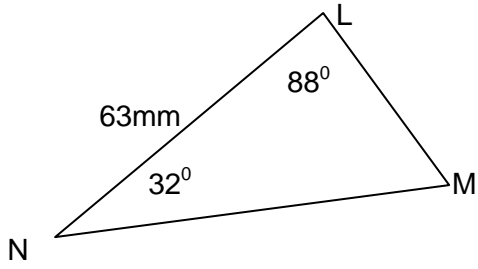
..... 1 mark (L8/3)

(b) Work out  $3.25 \times 10^5 \times 2.4 \times 10^{-1}$   
Give your answer in standard form

..... 1 mark (L8/3)

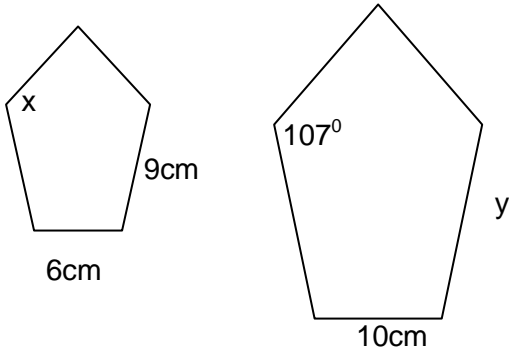
**Shape, Space and Measure**

4 (a) Are the triangles ABC and LMN congruent?  
Explain your answer



..... 1 mark (L8/11)

(b) These two pentagons are similar.  
Work out the size of angle x and the length of side y



x = .....<sup>0</sup> 1mark(L8/11)

y = ..... cm 2 marks (L8/11)

5. (a) Work out the length of AB.  
Give your answer correct to 3 sf.

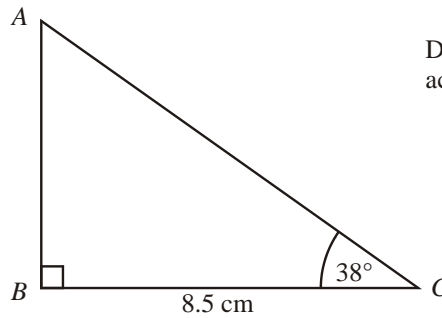


Diagram **NOT** accurately drawn



AB = ..... cm 2 marks (L8/12)

(b) Calculate the value of x.  
Give your answer correct to 1 decimal place.

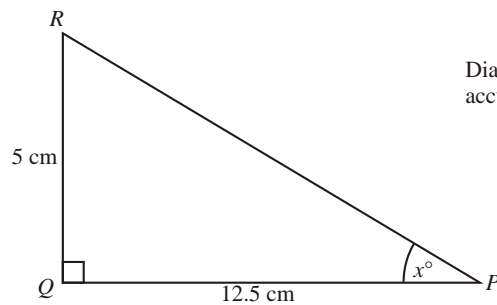


Diagram **NOT** accurately drawn

x = .....<sup>0</sup> 2 marks (L8/12)

**E Data Handling**

6 (a) The speeds of 100 cars on a motorway were recorded.  
The grouped frequency table shows some information about the speeds of these cars.

Speed ( $s$ mph)	Frequency
$40 < s \leq 50$	4
$50 < s \leq 60$	19
$60 < s \leq 70$	34
$70 < s \leq 80$	27
$80 < s \leq 90$	14
$90 < s \leq 100$	2

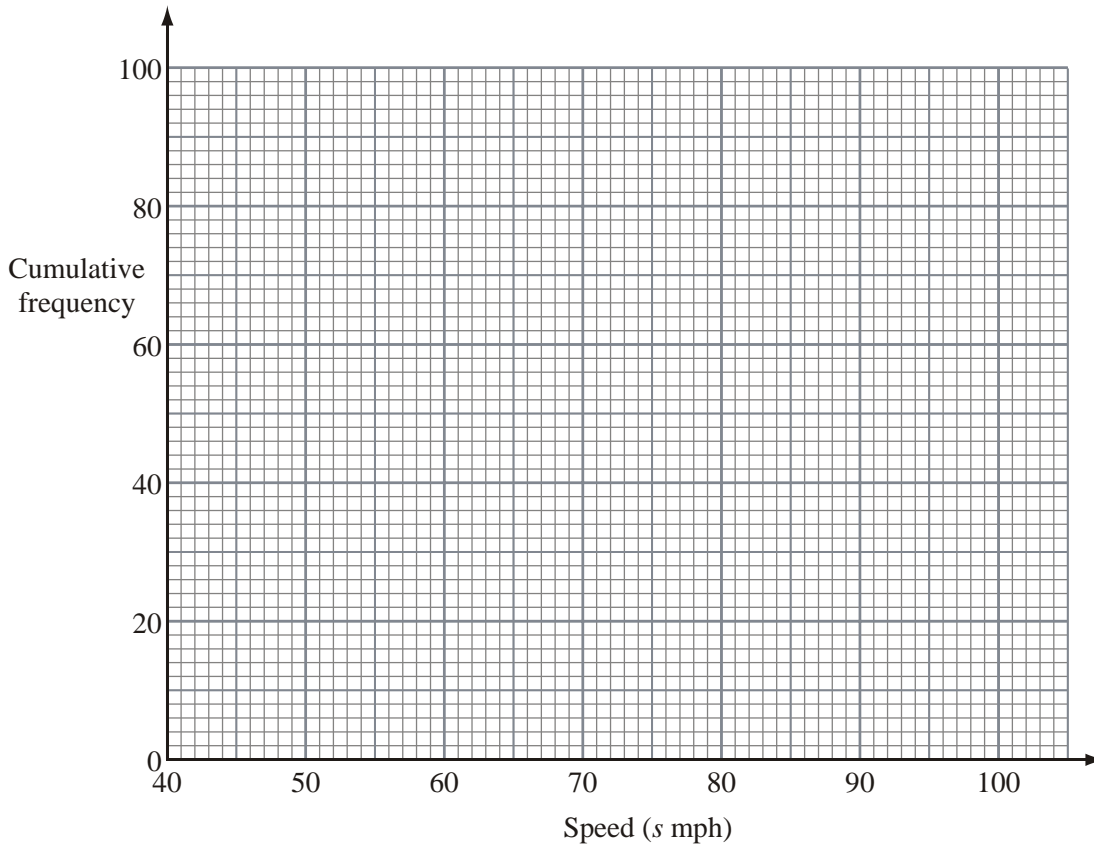
Speed ( $s$ mph)	Cumulative Frequency
$40 < s \leq 50$	4
$40 < s \leq 60$	
$40 < s \leq 70$	
$40 < s \leq 80$	
$40 < s \leq 90$	
$40 < s \leq 100$	

(a) Complete the cumulative frequency table.

1 mark (L8/14)

(b) On the grid, draw a cumulative frequency graph for your table.

1 mark (L8/14)



(c) Use your graph to find an estimate for the median speed.

..... mph 1 mark(L8/14)

(d) Use your graph to find an estimate for the interquartile range.

..... mph 2 marks (L8/14)