

**AQA, OCR, Edexcel**

**GCSE**

# GCSE Maths

## Real Life Graphs Questions

Name:

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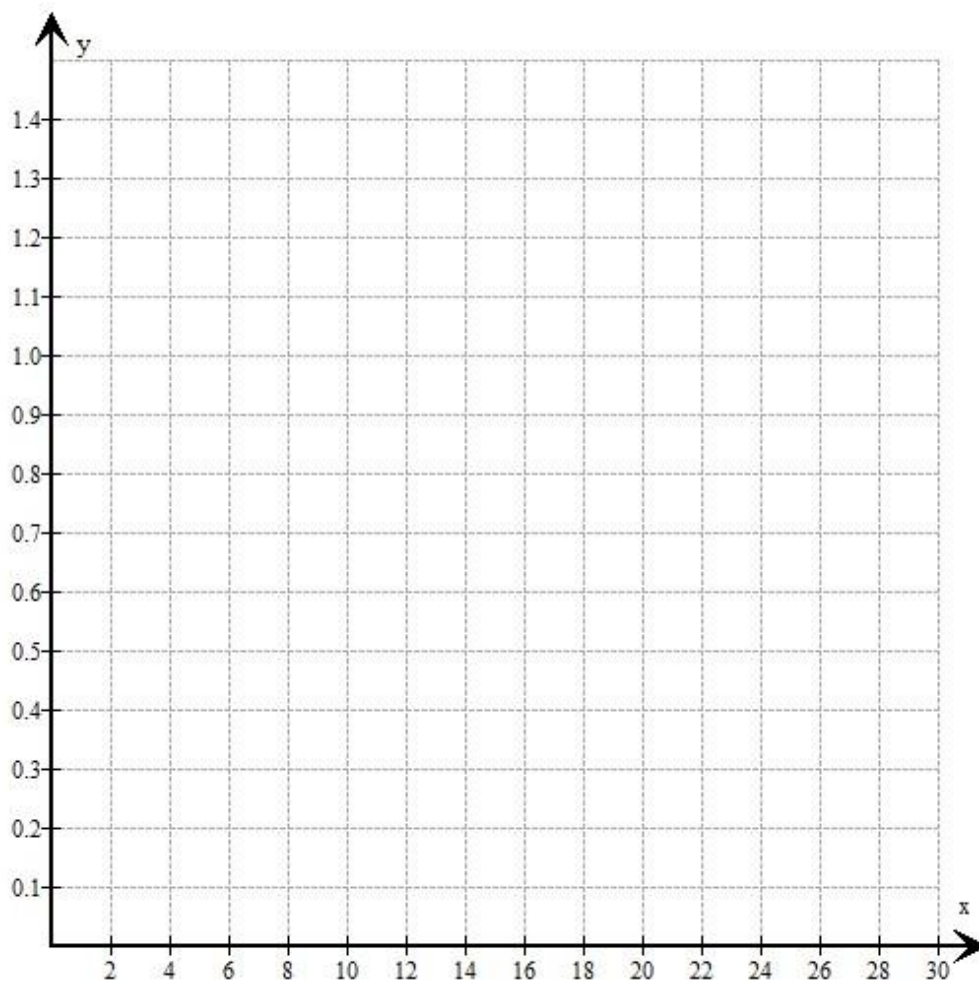
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Total Marks: /15

## Real Life Graphs

1. The table below compares the average amount of water consumed by pupils at a school against the average daily temperature over a seven-day period.

Average temperature ( $^{\circ}\text{C}$ )	15	16	20	22	28	24	20
Litres of water consumed (L)	0.5	0.6	0.8	1	1.4	1.1	1



- a. Plot a scatter graph using the information in the table. Mark 'Average temperature' as the independent variable (x-axis) and 'Litres of water consumed' as the dependent variable (y-axis).

(2 Marks)

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- b. Describe the correlation between average temperature and number of litres of water consumed.

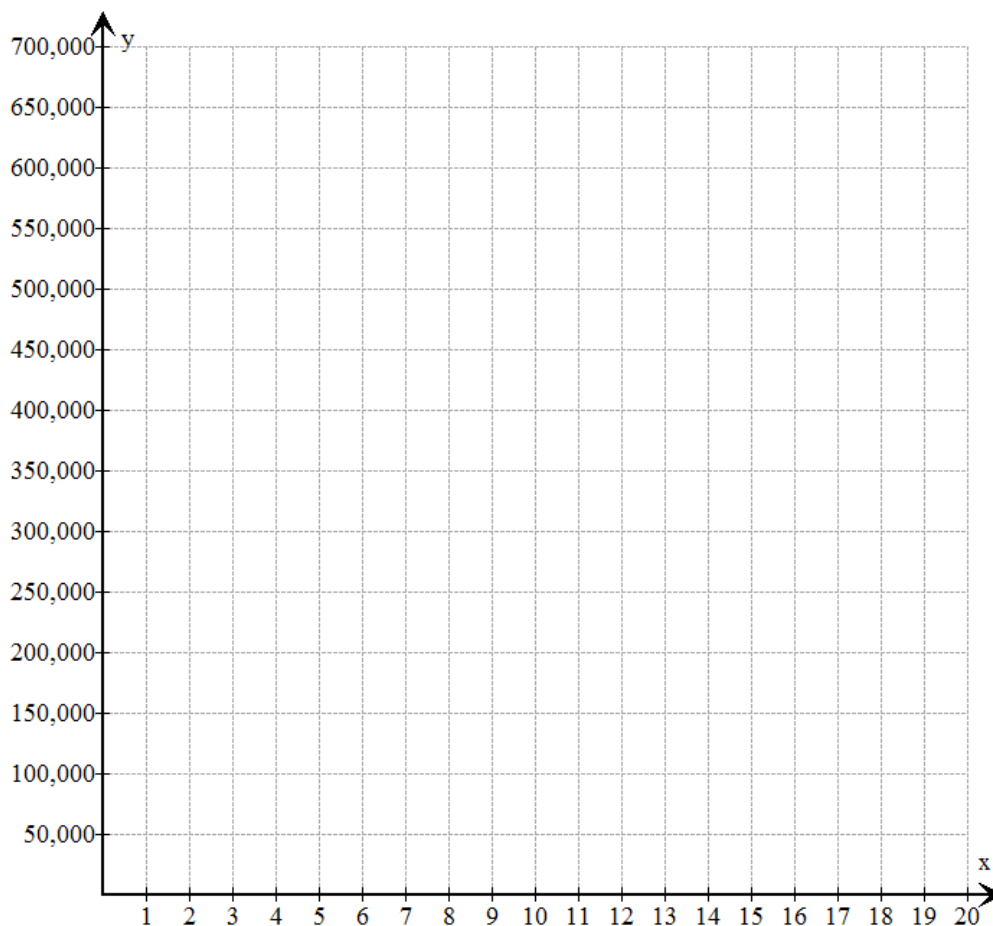
(1 Mark)

- c. Estimate the average temperature when 1.3 litres of water are consumed.

(2 Marks)

2. The table below compares the number of music singles sales against the number of weeks in the UK top 40 chart.

Number of singles sold	640000	520000	410000	330000	260000	200000	150000	115000	90000
Weeks in the UK top 40	1	3	5	7	9	11	13	15	17



- a. Plot a scatter graph using the information in the table. Mark 'Weeks in the UK top 40' as the independent variable (x-axis) and 'Number of singles sold' as the dependent variable (y-axis).

(2 Marks)

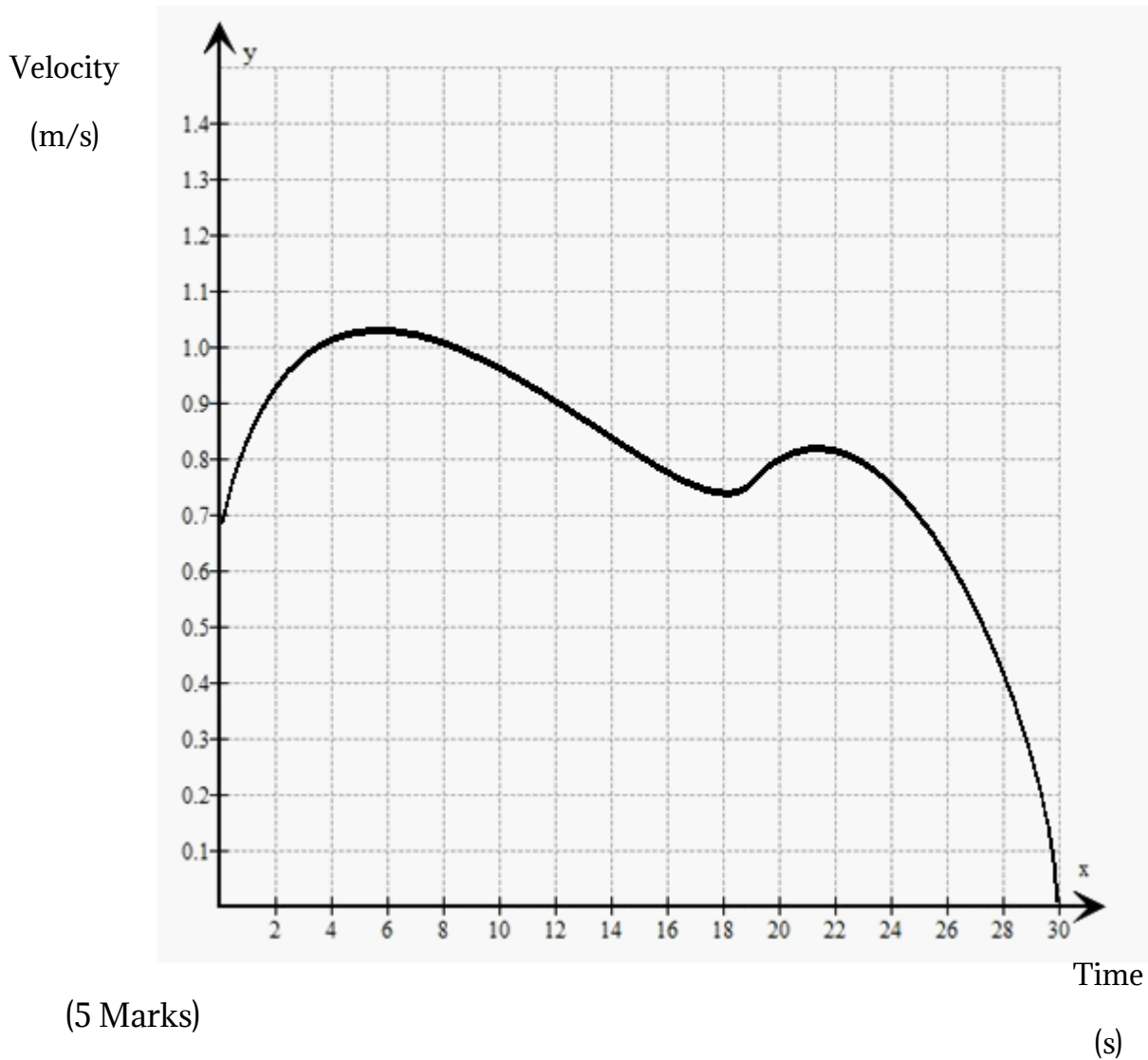
- a. Describe the relationship between average number of singles sold and weeks in the UK top 40.

(1 Mark)

- b. Use your graph to estimate the number of singles sold for a single which last 8 weeks in the UK top 40.

(2 Marks)

3. The graph below shows part of Emma's morning walk. Use the graph to estimate the distance she ran during the 30 seconds shown.



(5 Marks)