

$y = mx + c$ (Basic)

Week 9

Lesson Time : 30 - 35 Minutes

Course : Foundation or Higher

Grade : 5

Back to Basics

Core

Let's Do It!

GCSE Revision Video 45

- **Prior Checklist:** A pack of A5/A6 revision cards.

A pen.

- **Our Video Structure:**

Back to Basics: Quick re-cap.

Core: *Create* your own revision cards with exam style questions.

Let's Do It!: *Apply* your revision cards to another set of exam style questions.

Instructions: Print out this worksheet and watch the revision video simultaneously.

Pause and Play the video unlimited times to review your work and write the answers in the blank spaces. Once you have written your answers, check these with the tutorial answers, as explained in the video.


Create your OWN revision cards when prompted on the worksheet (Back to Basic and Core sections).

Apply your OWN revision cards (Let's Do It! section).

Self Assess yourself (Out of 10) on your revision planner after you have completed the revision video.

WATCH this revision video and **MANY** others on our **FULL** courses at www.mathsmemory.co.uk

Let's get started and create our Master revision card with this suggested template.



Maths Memory

Learn:

- Calculate gradient
- Calculate mid point
- Plot $x + y = c$
- Parallel lines

Topic: $y = mx + c$ (Basic)

Date/week: _____


GRADE
5

Step 3

Step 2

Step 1

Example(s):



Back to Basics- Starter questions to warm you up



Back to Basics

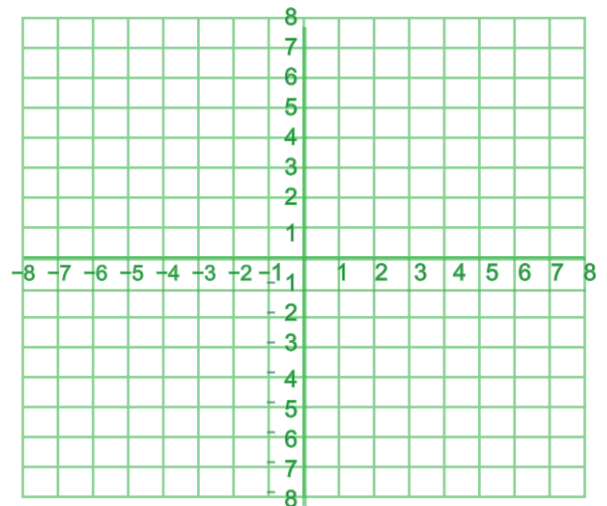
Topic: Basic $y=mx+c$

Question 1

Plot the following graphs (without a table)

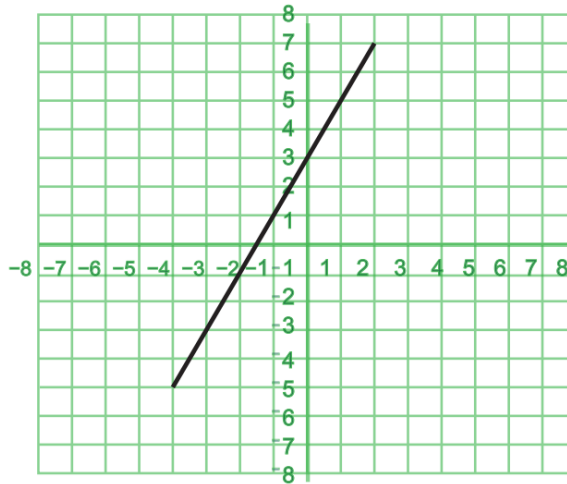
a) $y = 2x - 1$

b) $y = -3x + 4$



Question 2

Find the equation of the straight line L_1 .
Give your answer in terms of $y=mx+c$



Question 3

A straight line L_1 passes through the coordinates $A(-1,1)$ and $B(2,7)$.
Find the gradient of L_1 .

Let's get our revision card and create Section A. Look at video for guidance.



Back to Basics

Topic: **Basic $y=mx+c$**

Question 4

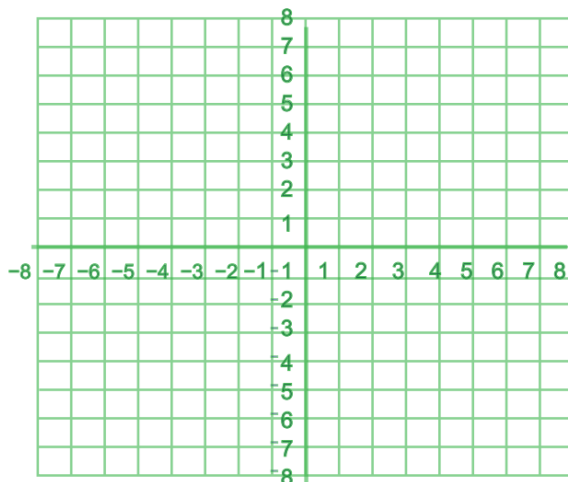
Find the mid point between points A(3,4) and B(6,2).

Let's get our revision card and create Section B. Look at video for guidance.



Question 5

Sketch the graph of $x+y=3$



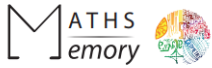
Let's get our revision card and create Section C. Look at video for guidance.

My Tool Kit

Topic: _____ Grade: _____

C

Core- Create your revision cards with these exam style questions



Core 1

Topic: Basic $y=mx+c$

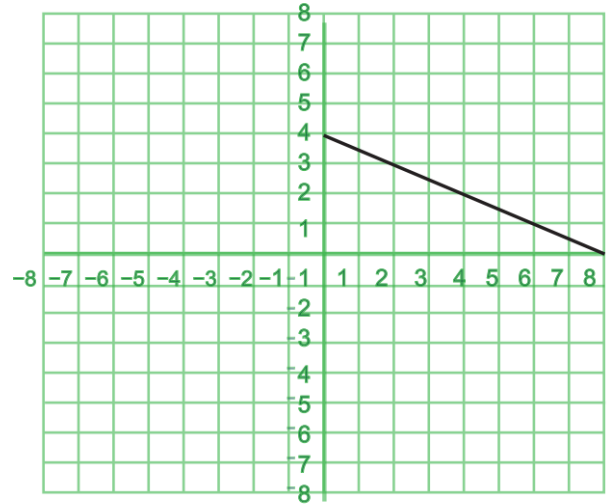
Question 1

The graph shows the volume of liquid (L litres) in a container at time t (mins).

a) Find the gradient

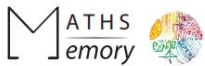
b) Explain what this gradient represents.

c) Explain what the y intercept represents.



Grade

4 (4 Marks)



Core 2

Topic: Basic $y=mx+c$

Question 2

- a) Point A is the point with coordinates (5,6)
Point M is the point with coordinates (11,-2)
M is the midpoint of straight line AC.

Work out the coordinates of C.

- b) Point A is the point with coordinates (3, a)
Point B is the point with coordinates (-1, 6).
The gradient of the line AB is -2.

Find the value of a .

Grade

5 (4 Marks)

Question 3

L_1 goes through points $A(4,-3)$ and $B(2,-2)$.
Find the equation of L_1 in terms of $y = mx+c$.

Grade

5 (3 Marks)

Challenge

Topic: Basic $y=mx+c$

Question 4

Which ONE line below is parallel to $y = 1/2x - 3$.

A: $y = -1/2x + 1/2$

B: $2y = 1-x$

C: $2x - 4y = 6$

D: $2y = 4x + 3$

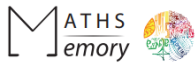
Grade

6 (2 Marks)

Let's get our revision card and create Section D. Look at video for guidance.



Let's Do It! - Apply your revision cards to another set of exam style questions



Let's Do It !

Topic: Basic $y=mx+c$

Question 1

L1 passes through points A (-2,-3) and B (-6,3).
L2 is parallel to L1 and passes through (0,-1).

Find equation L2. Write in terms of $y = mx+c$.

Grade

5 (3 Marks)



Let's Do It !

Topic: Basic $y=mx+c$

Question 2

The equation of the line L1 is $y = 2x-3$.
The equation of the line L2 is $3y-6x=8$.

a) Show that these two linear equations are parallel to each other.

b) Write down the name of any another linear equation that is parallel to $2y-x = 4$.

Grade

5 (3 Marks)

Congratulations. You have completed this topic.

Now go back to your revision planner and rate yourself out of 10.



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