SQA Past paper questions

2024 - Paper 1 - Question 11

A straight line has equation $x+4y-24=0$.

Find the gradient of this line. 2

Click here for video solution.

2022 - Paper 1 - Question 6

Find the equation of the line passing through the points $(-3,-1)$ and $(-5,7)$.

Give the equation in its simplest form.

3

Click here for video solution.

2021 - Paper 2 - Question 9

A straight line has equation $3x+4y-8=0$.

(a) Find the gradient of the line. 2

(b) State the coordinates of the point where the line crosses the y-axis. 1

Click here for video solution.

2019 - Paper 2 - Question 13

Find an expression for the gradient of the line joining point A(6,9) to point B$(4p,4p^2)$.

Give your answer in its simplest form. 3

Click here for video solution.

2018 - Paper 2 - Question 14

A straight line has equation $2x - 5y = 20$.

Find the coordinates of the point where this line crosses the y-axis. 2

Click here for video solution.

2017 - Paper 2 - Question 11

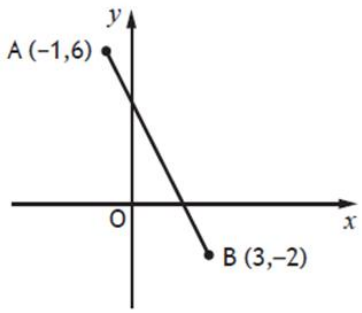
A straight line has equation $3x - 5y - 10 = 0$.

Find the gradient of this line. 2

Click here for video solution.

2017 - Paper 1 - Question 6

The diagram below shows the straight line joining points A and B.



Find the equation of the line AB.

Give the equation in its simplest form. 3

Click here for video solution.

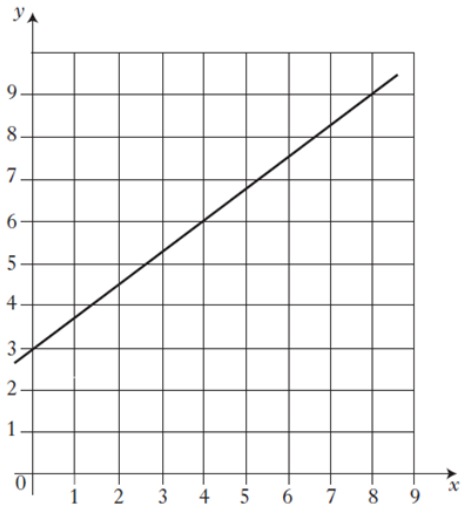
2015 - Paper 1 - Question 8

Find the equation of the line joining the points (–2, 5) and (3, 15).

Give the equation in its simplest form. 3

Click here for video solution.

2014 - Paper 1 - Question 1



Find the equation of the straight line shown in the diagram above. 3

Click here for video solution.

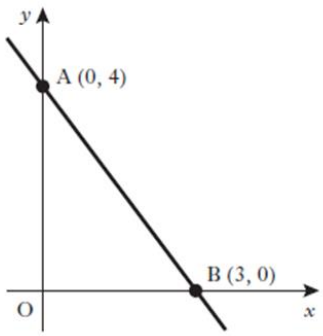
2014 - Paper 1 - Question 11

(a) A straight line has equation $4x+3y=12$.
Find the gradient of this line. 2

(b) Find the coordinates of the point where this line crosses the x-axis. 2

Click here for video solution.

2013 - Paper 1 - Question 2

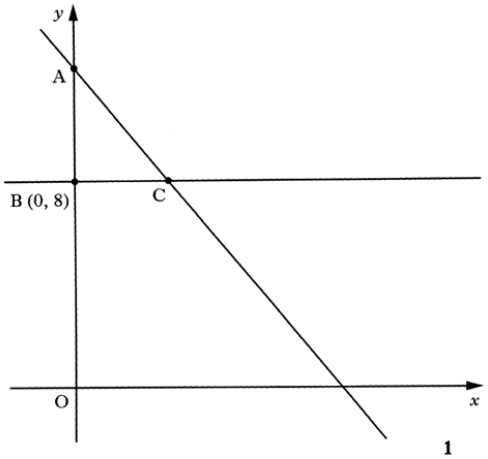


Find the equation of the straight line AB. 3

Click here for video solution.

2012 - Paper 1 - Question 3

The straight line with equation $4x + 3y = 36$ cuts the y-axis at A.



(*a*) Find the coordinates of A. **1**

This line meets the line through B (0, 8), parallel to the x-axis, at C as shown above.

(*b*) Find the coordinates of C. **2**

Click here for video solution.

2011 - Paper 1 - Question 8

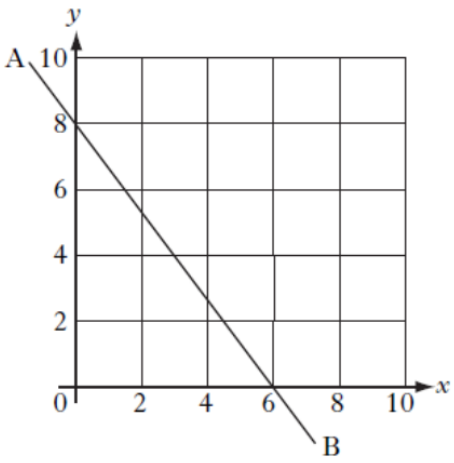
A straight line is represented by the equation $y = mx + c$.

Sketch a possible straight line graph to illustrate this equation when $m > 0$ and $c < 0$.

2

Click here for video solution.

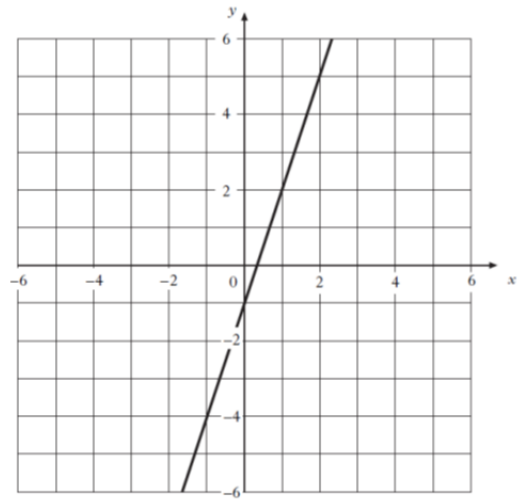
2010 - Paper 1 - Question 1



Find the equation of the straight line AB shown in the diagram. **3**

Click here for video solution.

2009 - Paper 1 – Question 2



Find the equation of the straight line shown in the diagram. 3

Click here for video solution.

2009 - Paper 1 - Question 7

A straight line is represented by the equation $x + y = 5$.
Find the gradient of this line. 2

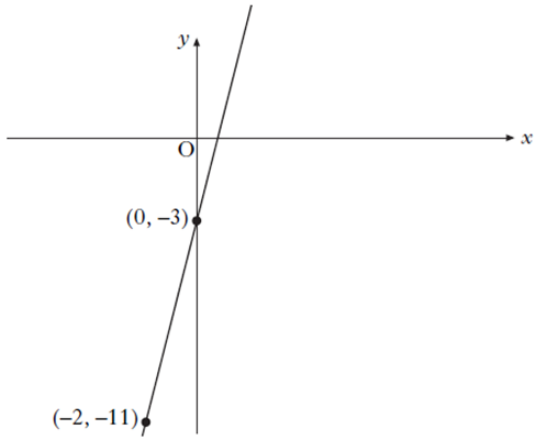
Click here for video solution.

2008 - Paper 1 - Question 1

A straight line has equation $y = 4x + 5$.
State the gradient of this line. 1

Click here for video solution.

2007 - Paper 1 - Question 2



Find the equation of the straight line passing through the points (0, –3) and (–2, –11). 3

Click here for video solution.

2006 - Paper 1 - Question 5

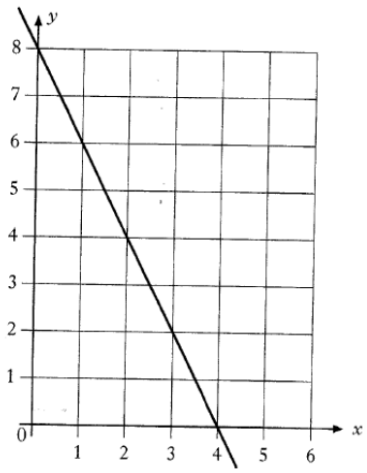
A straight line is represented by the equation $2y + x = 6$.

(a) Find the gradient of this line. 2

(b) This line crosses the y-axis at $(0, c)$.
Find the value of c. 1

Click here for video solution.

2005 - Paper 1 - Question 2



(a) Find the equation of the straight line shown in the diagram. 3

(b) Find the coordinates of the point where the line $y = 2x$ meets this line. 2

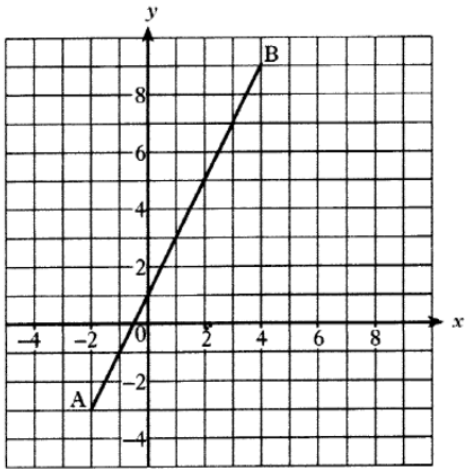
Click here for video solution.

2005 - Paper 2 - Question 3

A straight line has equation $3y = 12 - 4x$.
Find the coordinates of the point where it crosses the x-axis. 2

Click here for video solution.

2004 - Paper 1 - Question 2

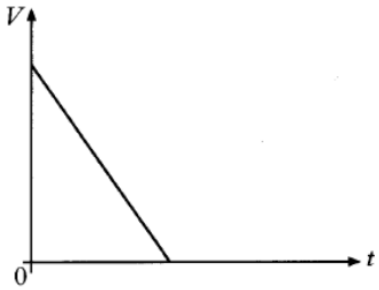


Find the equation of the straight line AB. 3

Click here for video solution.

2003 - Paper 2 - Question 4

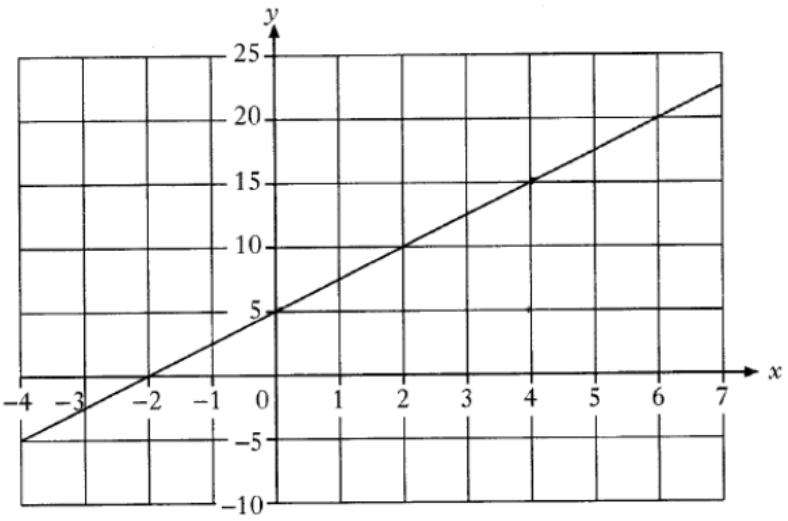
A bath contains 150 litres of water.
Water is drained from the bath at a steady rate of 30 litres per minute.
The graph of the volume, V litres, of water in the bath against the time, t minutes, is shown below.



Write down an equation connecting V and t. 3

Click here for video solution.

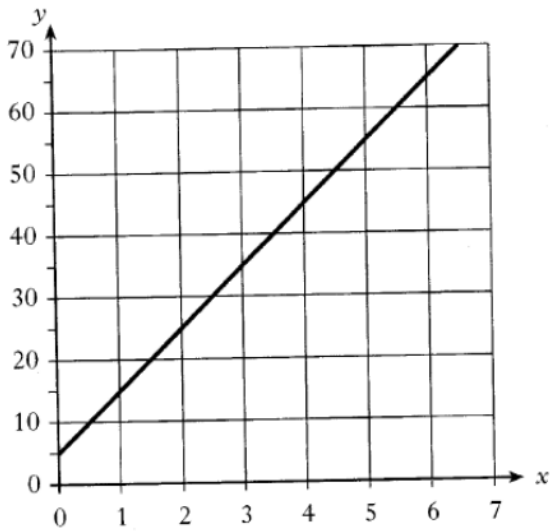
2002 - Paper 1 - Question 2



Find the equation of the straight line shown in the diagram. **3**

Click here for video solution.

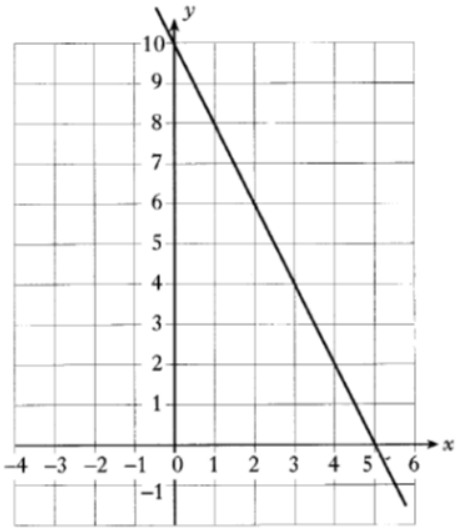
2001 - Paper 1 - Question 2



Find the equation of the straight line. **3**

Click here for video solution.

2000 - Paper 1 - Question 2



Find the equation of the straight line. 3

Click here for video solution.