

GJR

gbr.cymru

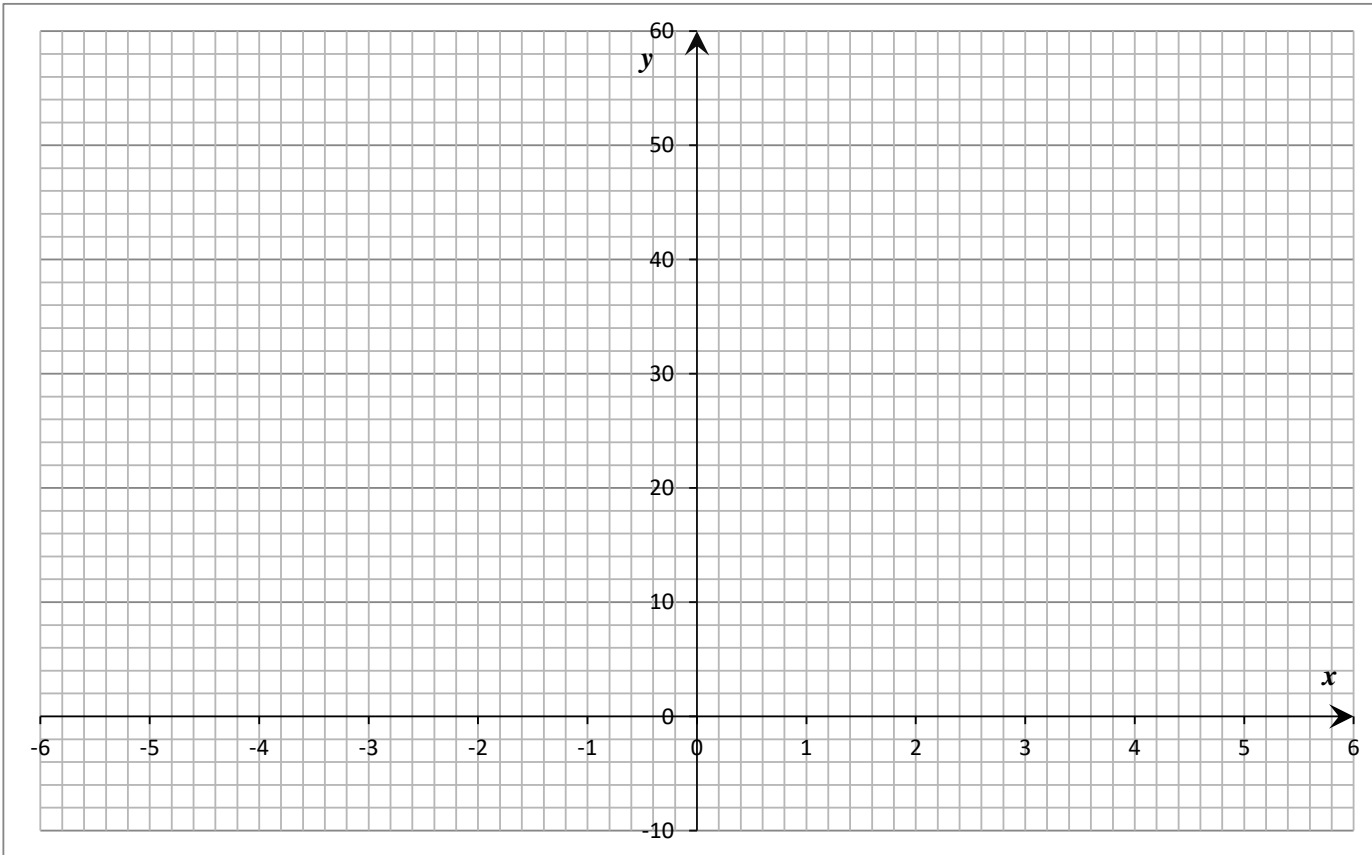
Simlutaenous Equations

Quadratic and Linear

An Introduction

1 Solve algebraically and sketch the graphs of both equations to check your answers

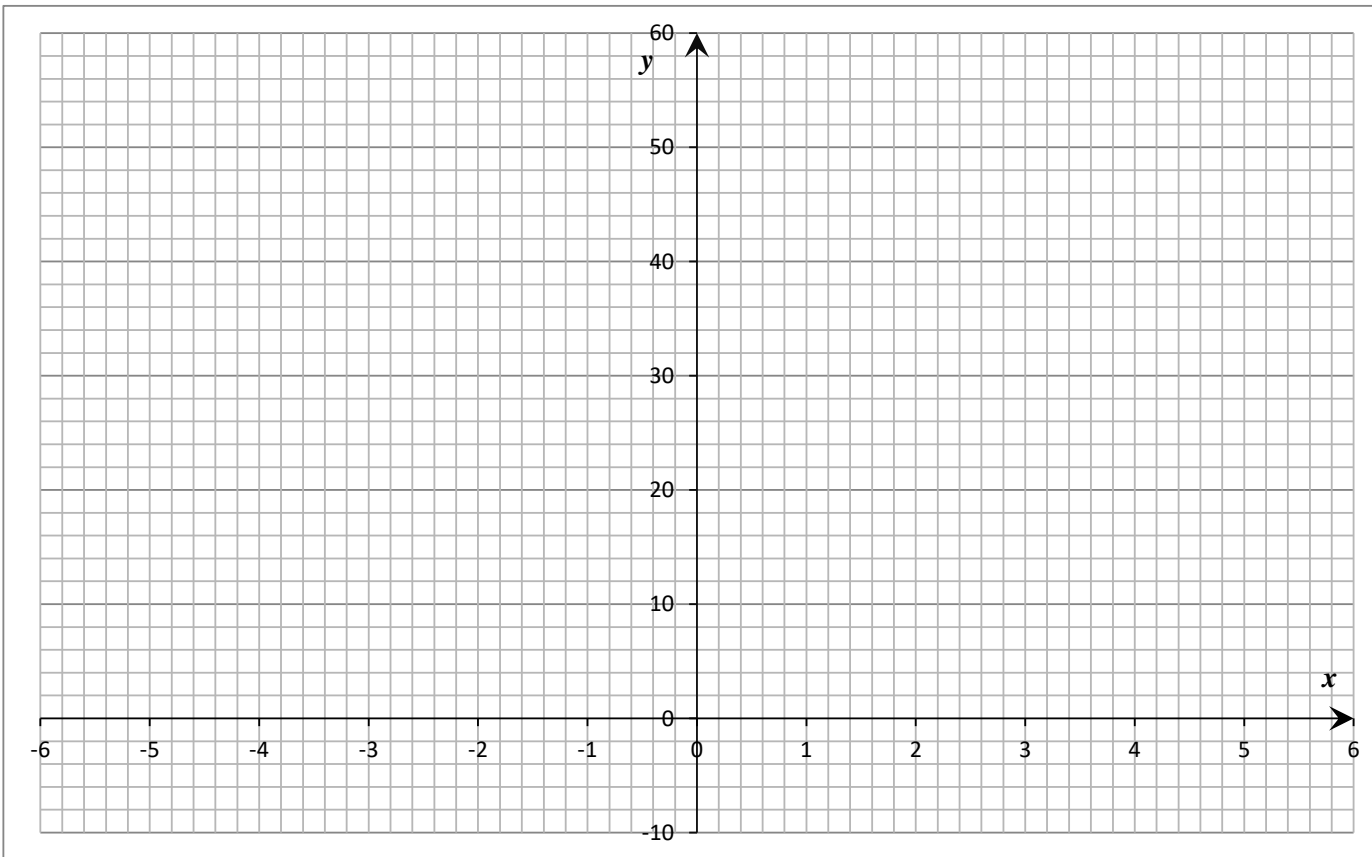
$$\begin{aligned}
 x^2 + 5x + 4 &= 0 \\
 y &= 2x + 14
 \end{aligned}$$



2

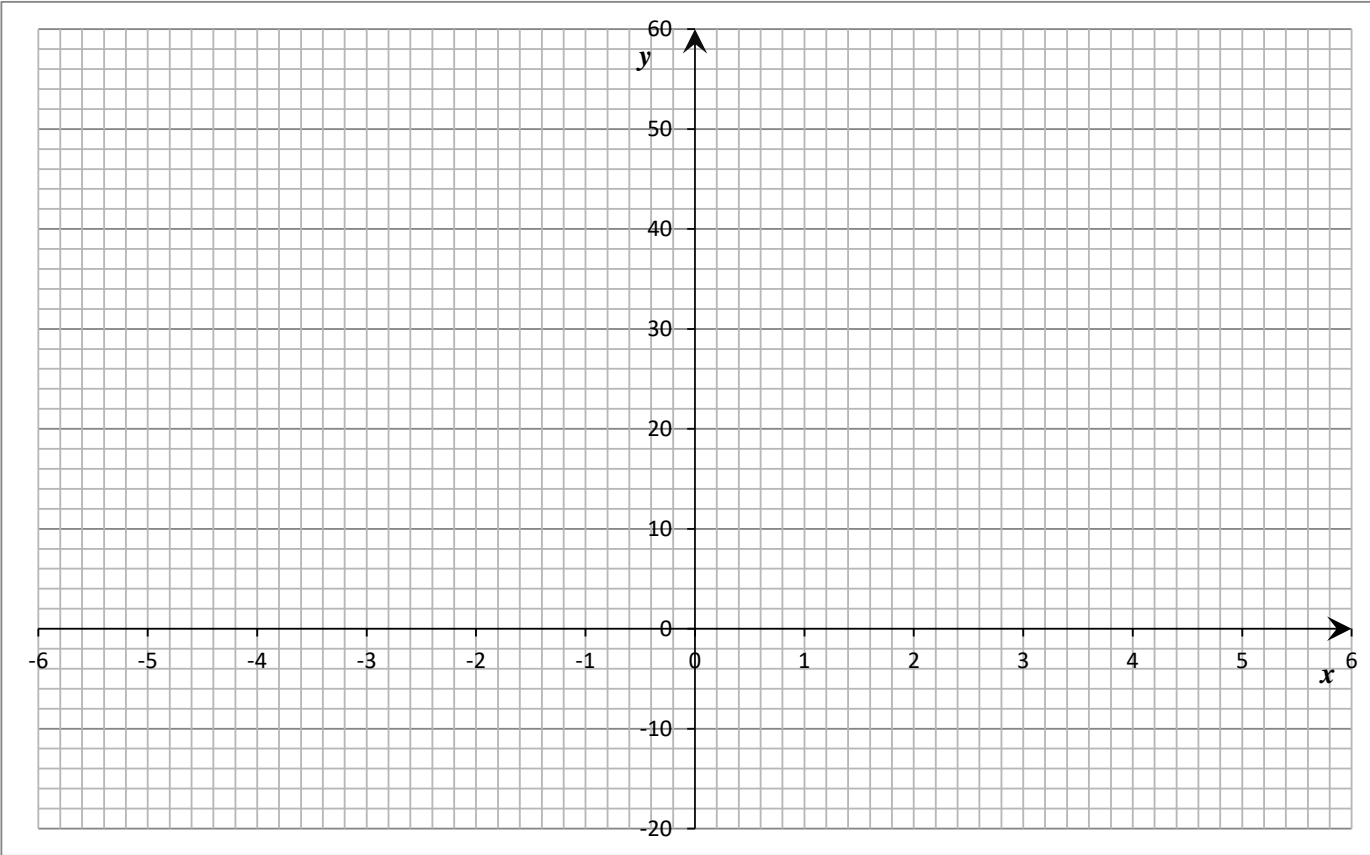
Solve algebraically and sketch the graphs of both equations to check your answers

$$\begin{aligned}x^2 + 6x + 8 &= 0 \\ y &= 3x + 20\end{aligned}$$



3 Solve algebraically and sketch the graphs of both equations to check your answers

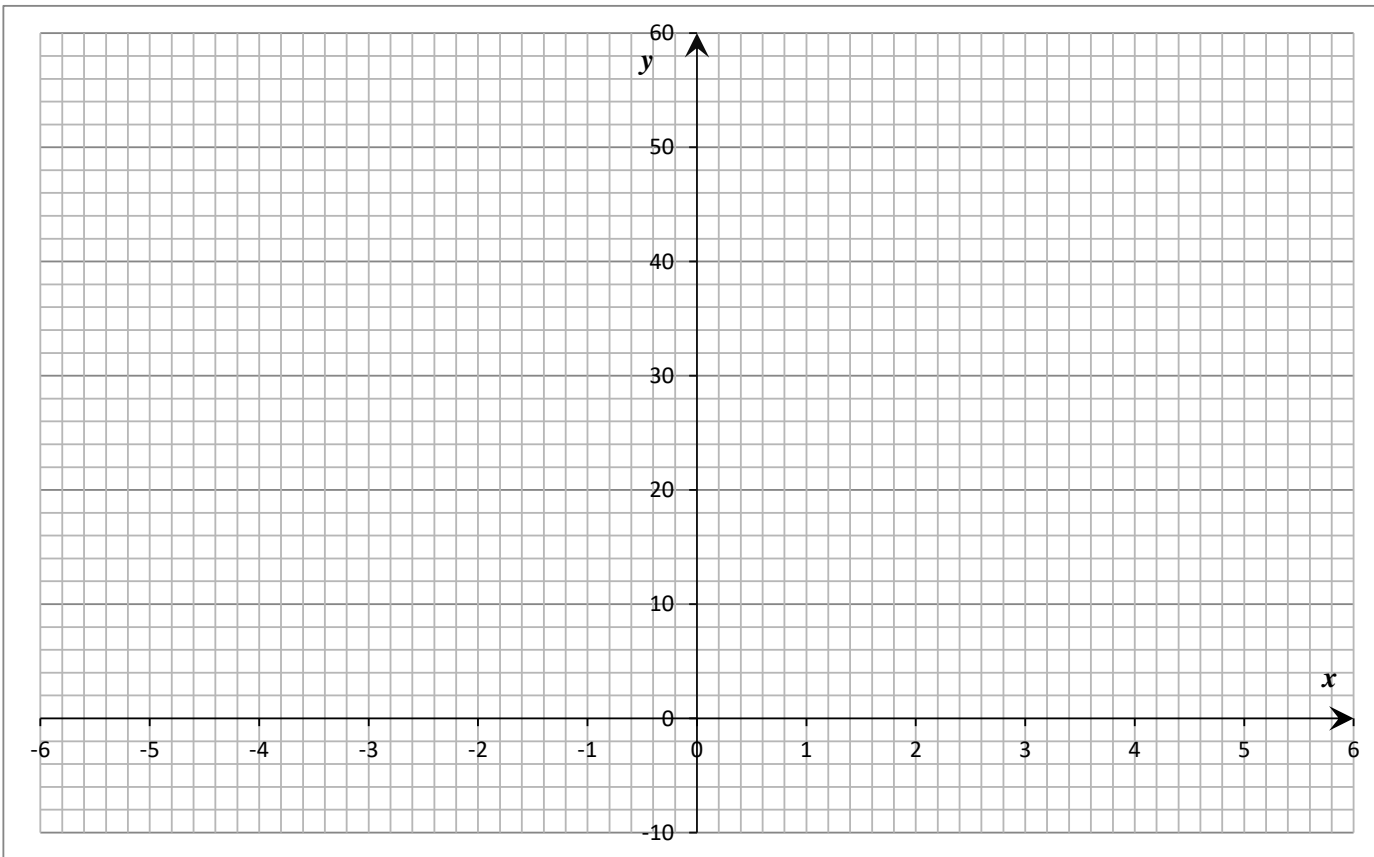
$$\begin{array}{r} x^2 + 4x + 3 = 0 \\ y = 3x + 9 \end{array}$$



4

Solve algebraically and sketch the graphs of both equations to check your answers

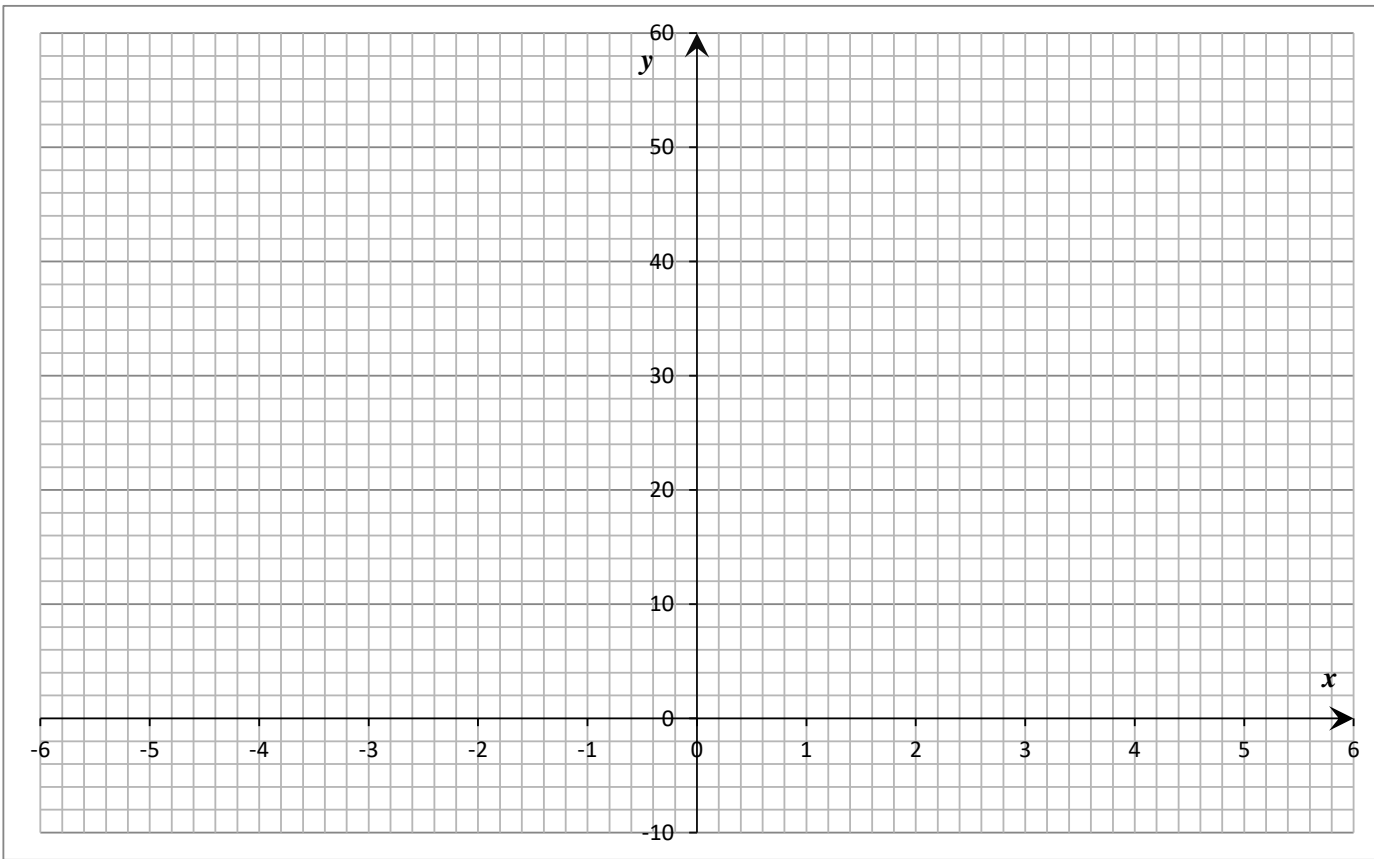
$$\begin{array}{ccccccc} x^2 & + & 5x & + & 4 & = & 0 \\ y & = & 2x & + & 11 & & \end{array}$$



5

Solve algebraically and sketch the graphs of both equations to check your answers

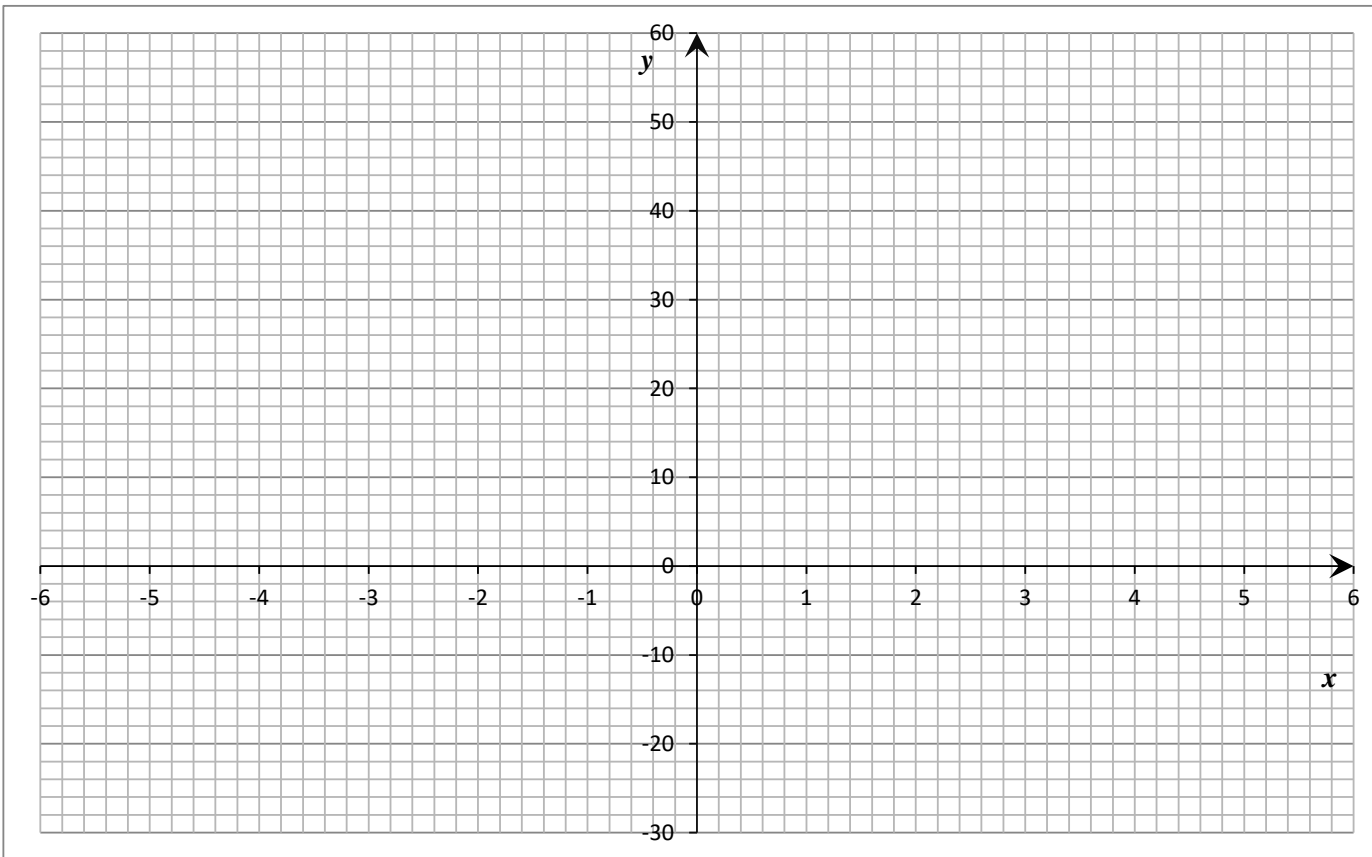
$$\begin{array}{cccccc}
 x^2 & + & 3x & - & 4 & = & 0 \\
 y & = & 2x & + & 8 & &
 \end{array}$$



6

Solve algebraically and sketch the graphs of both equations to check your answers

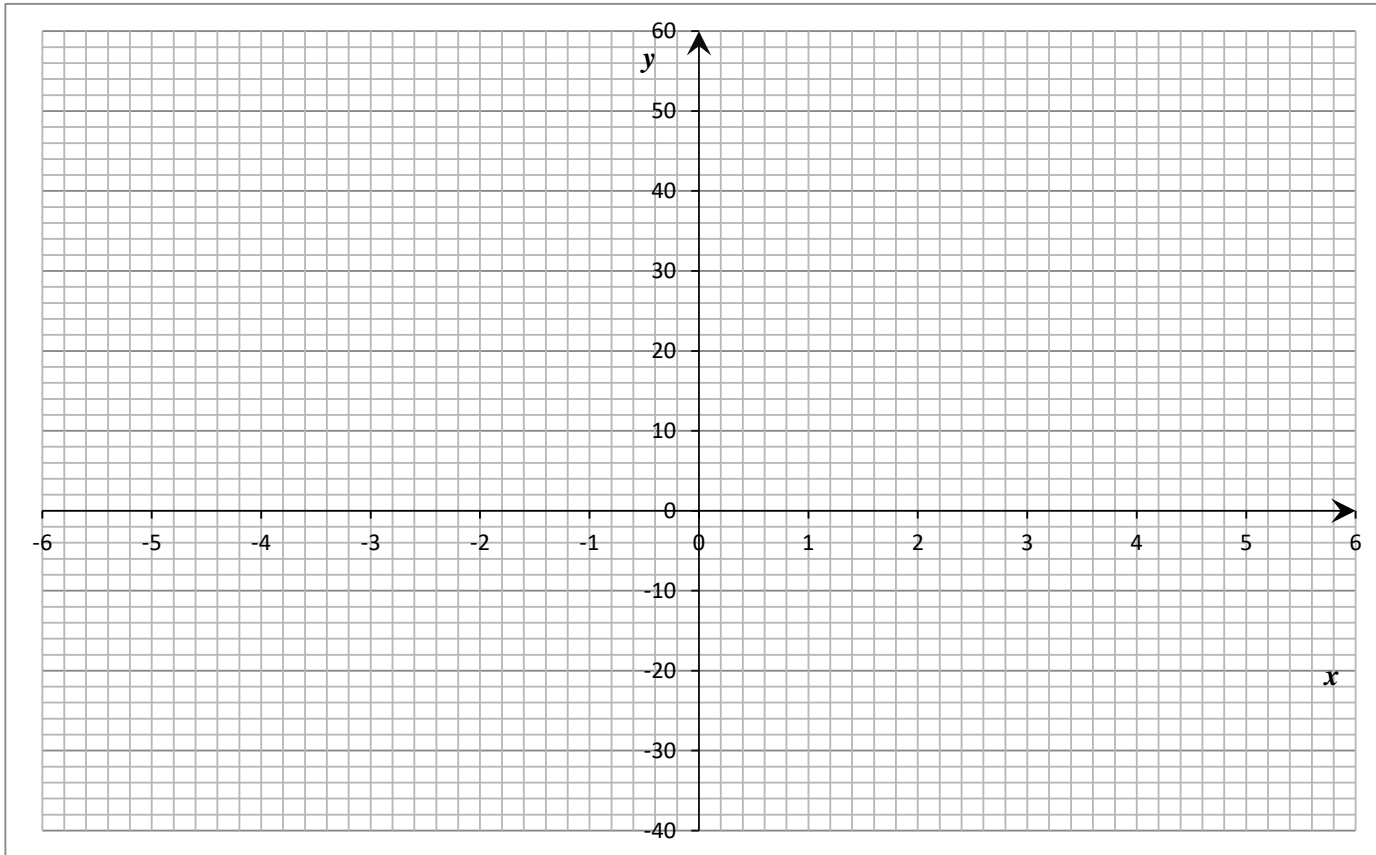
$$\begin{array}{rcccl} x^2 & + & 2x & - & 3 & = & 0 \\ y & = & 4x & + & 6 \end{array}$$



7

Solve algebraically and sketch the graphs of both equations to check your answers

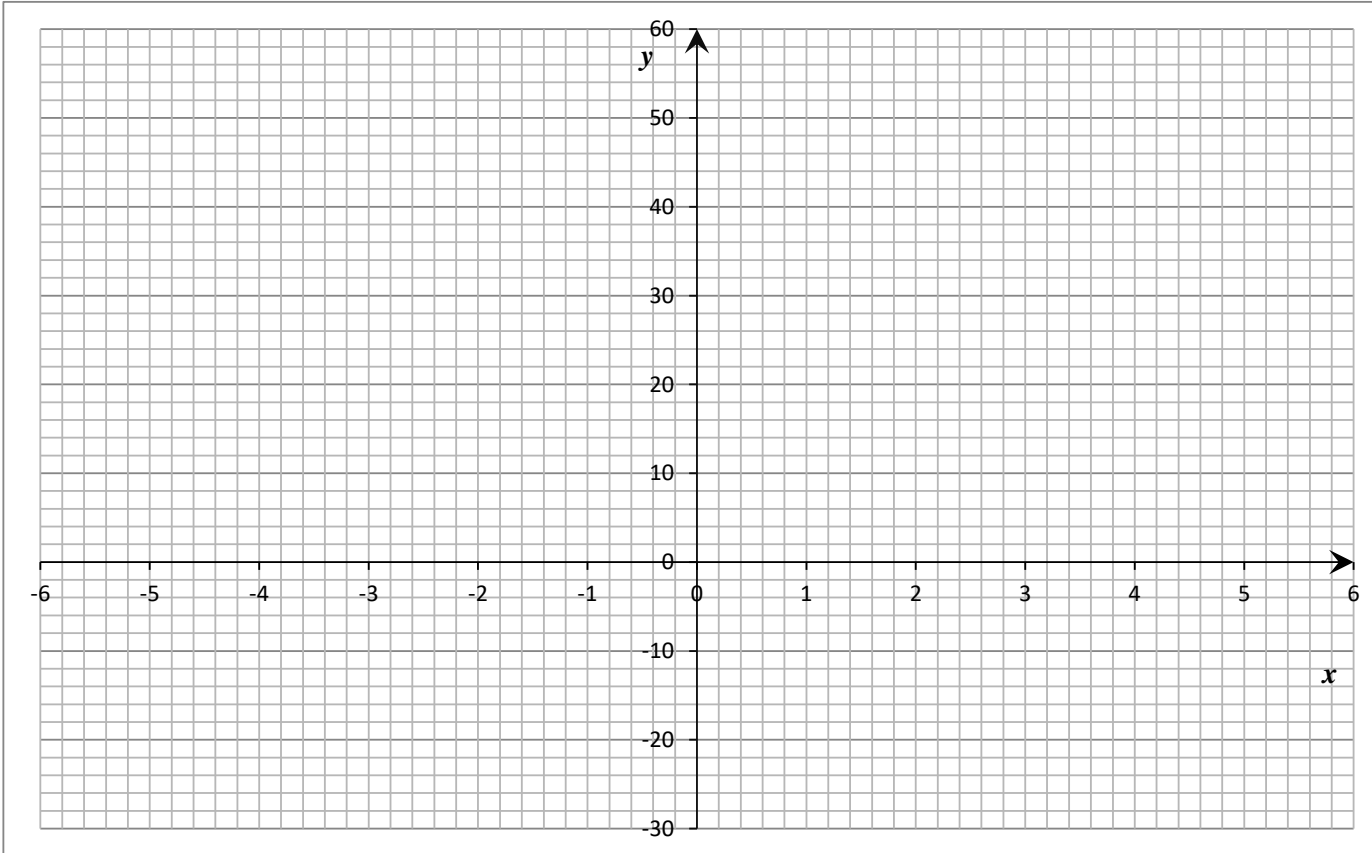
$$\begin{array}{rclclcl} x^2 & + & 2x & - & 12 & = & 0 \\ y & = & 4x & - & 4 \end{array}$$



8

Solve algebraically and sketch the graphs of both equations to check your answers

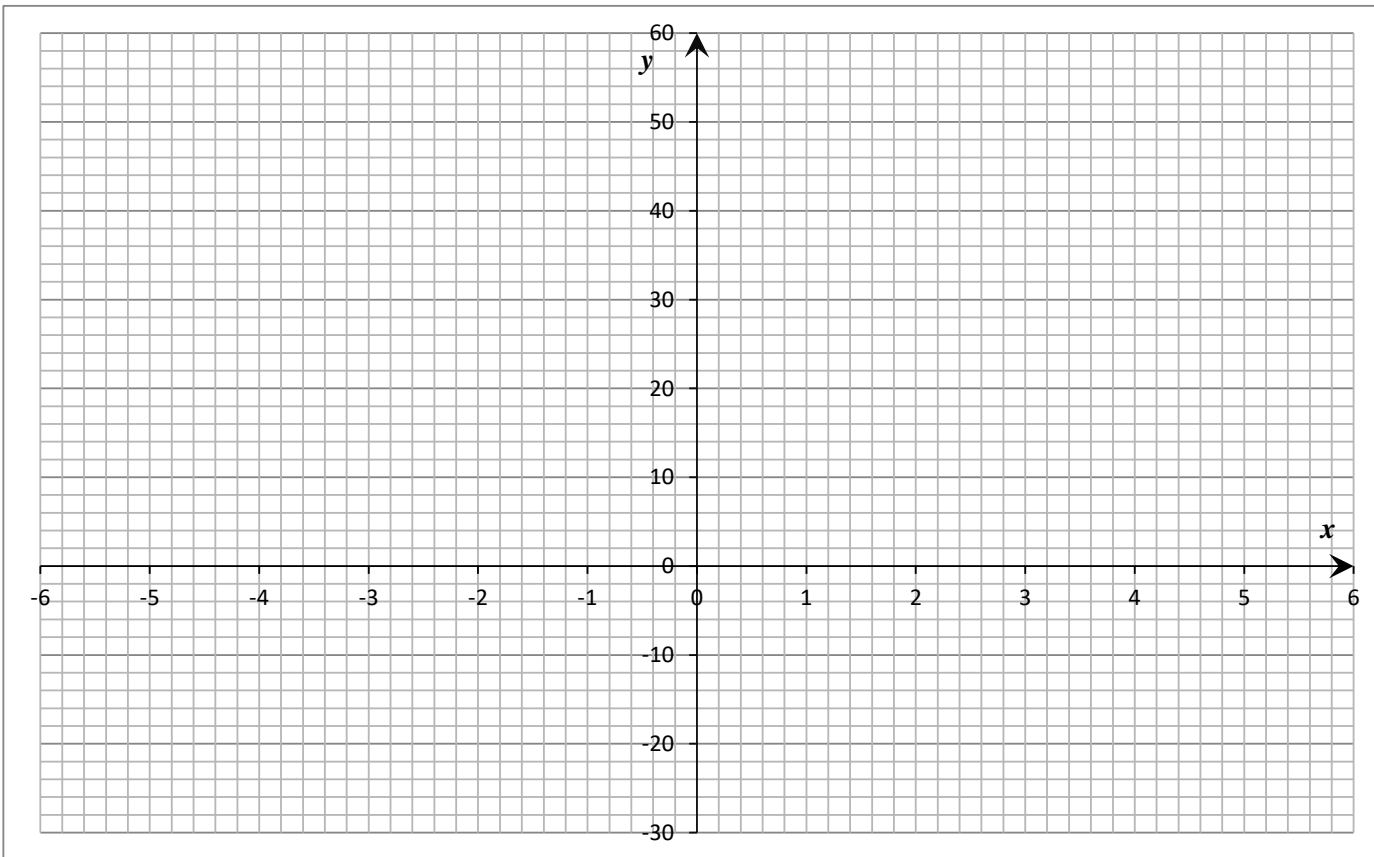
$$\begin{array}{rcccccc} x & ^2 & + & x & - & 20 & = & 0 \\ y & = & 3x & - & 5 & & & \end{array}$$



9

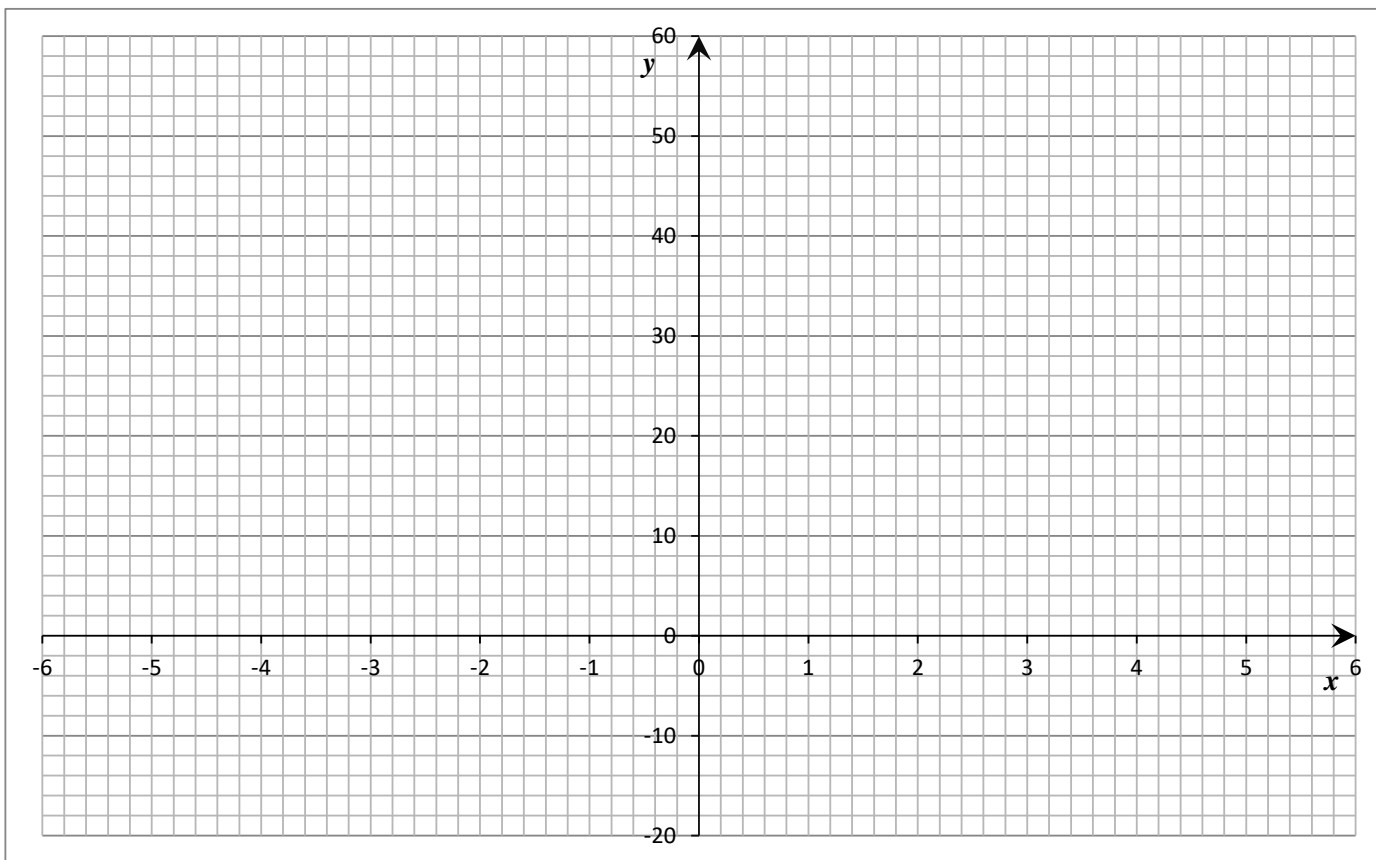
Solve algebraically and sketch the graphs of both equations to check your answers

$$\begin{array}{rcccccc} x^2 & + & x & - & 6 & = & 0 \\ y & = & -3x & - & 4 & & \end{array}$$



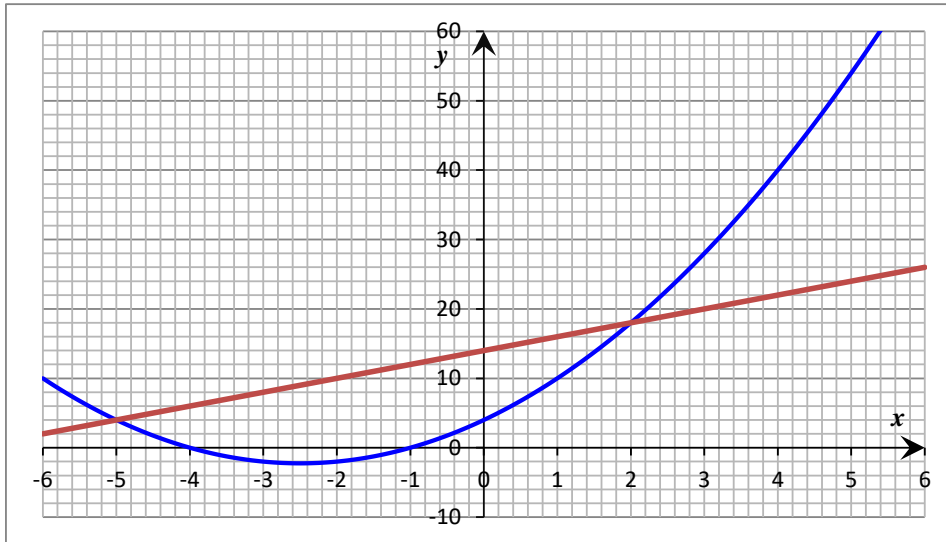
10 Solve algebraically and sketch the graphs of both equations to check your answers

$$\begin{array}{l} x^2 + 3x + 2 = 0 \\ y = -2x + 4 \end{array}$$



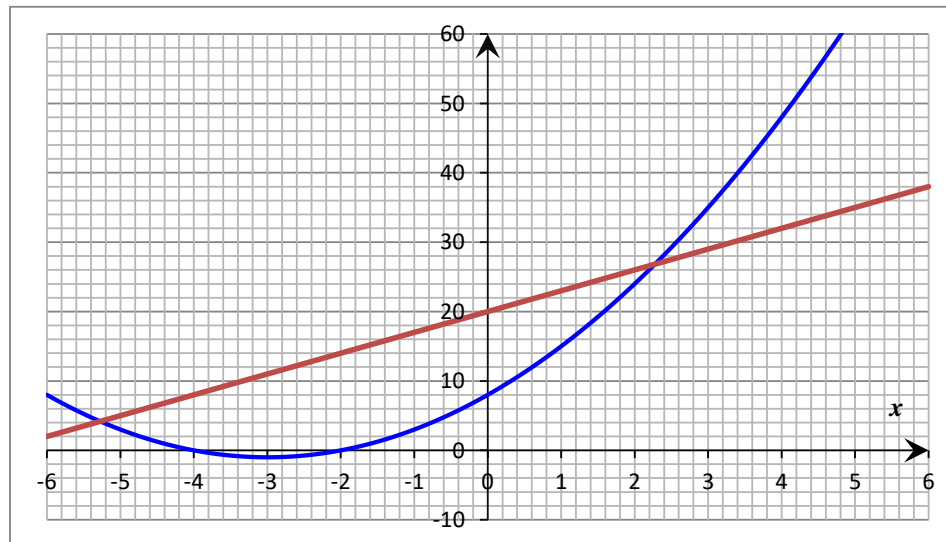
Answers

1



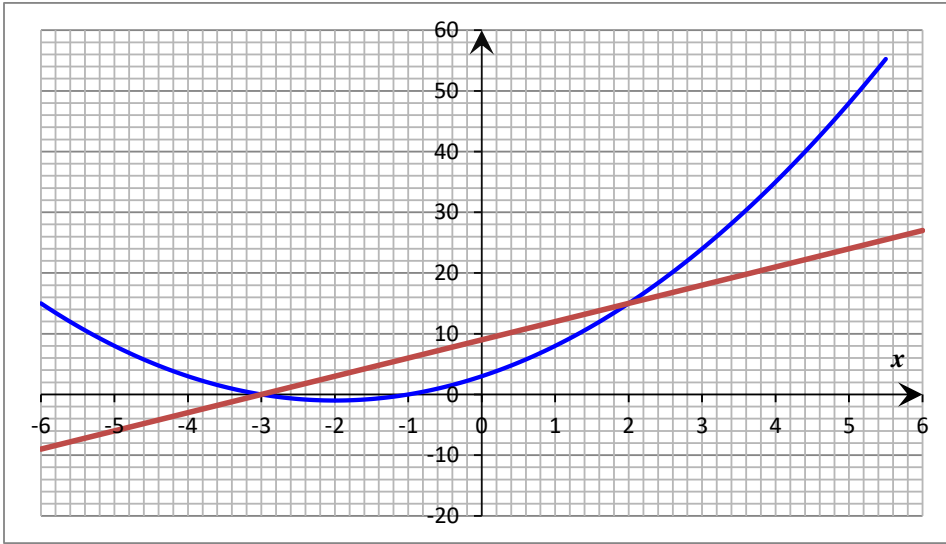
(2 , 18) (-5 , 4)

2



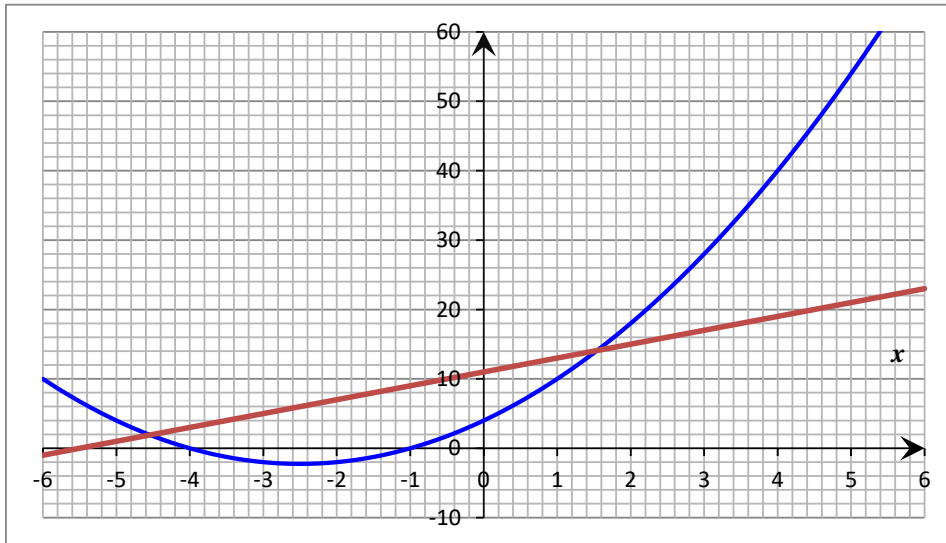
(2.3 , 26.8) (-5.3 , 4.2)

3



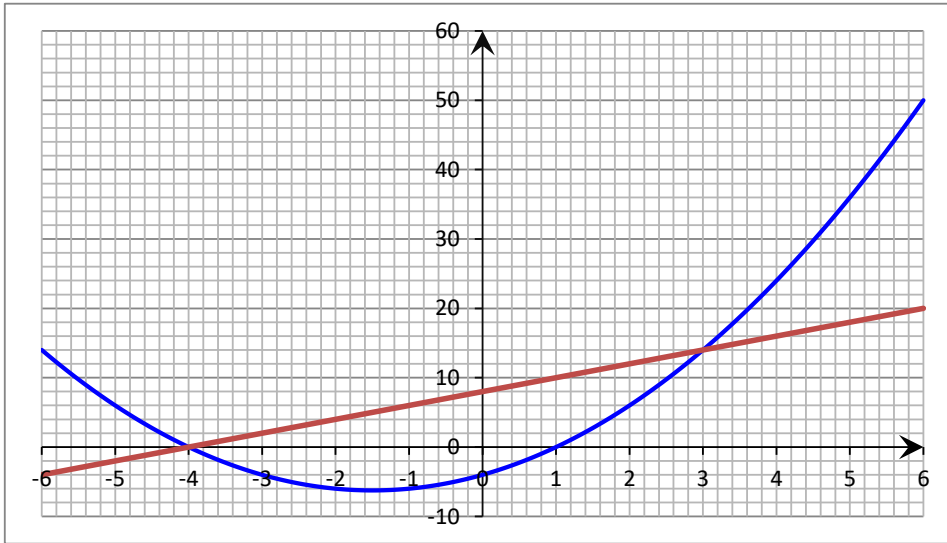
(2 , 15) (-3 , 0)

4



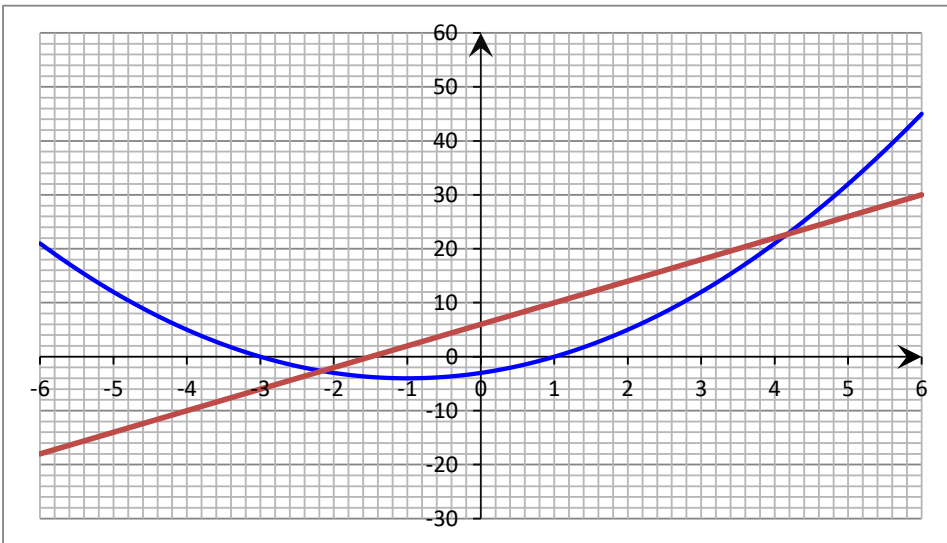
(1.5 , 14.1) (-4.5 , 1.9)

5



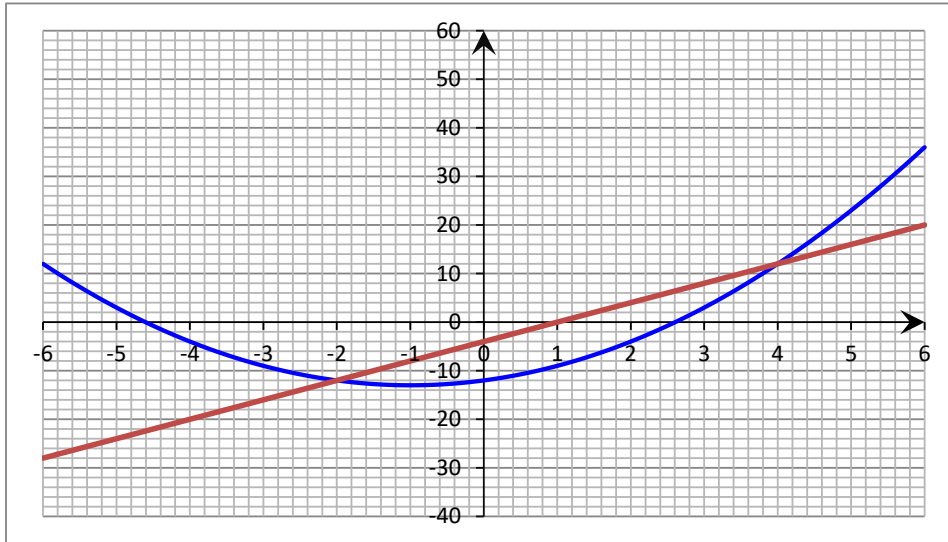
(3 , 14) (-4 , 0)

6



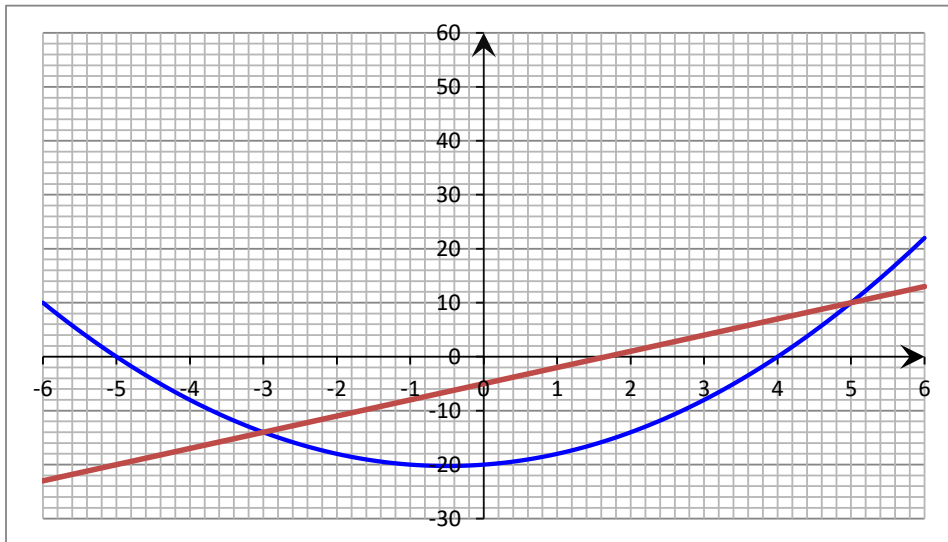
(4.2 , 22.6) (-2.2 , -2.6)

7



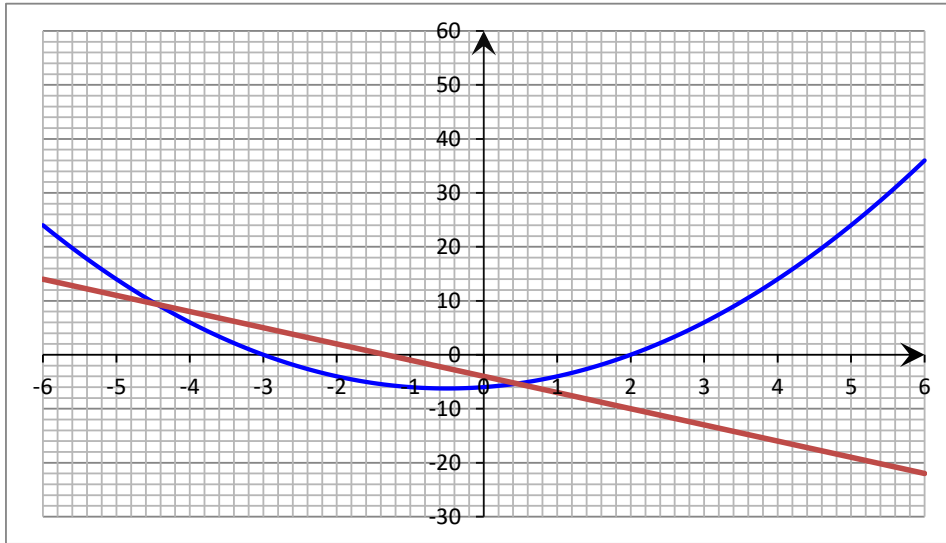
(4 , 12) (-2 , -12)

8



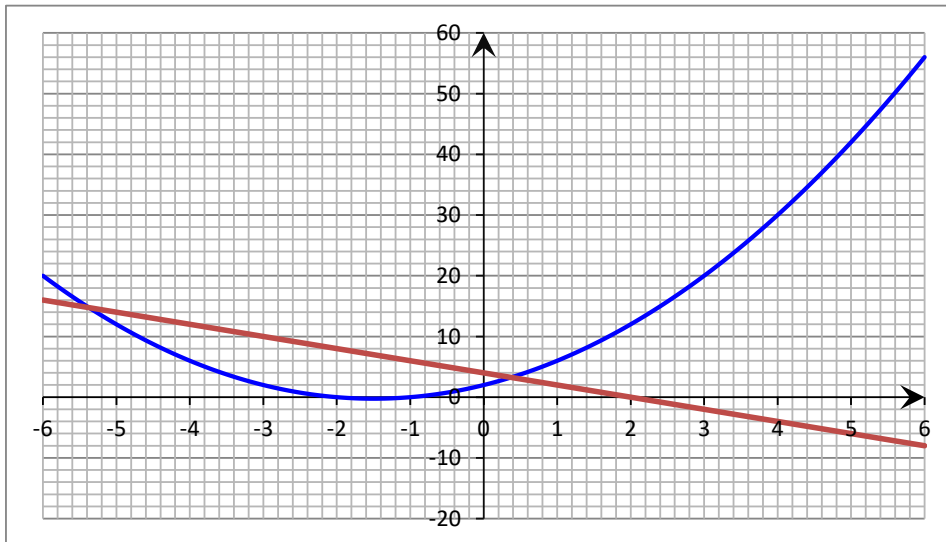
(5 , 10) (5 , -14)

9



(0.4 , -5.3) (-4.4 , 9.3)

10



(0.4 , 3.3) (-5.4 , 15)