Solving Non-Linear Simultaneous Equations GREEN

Solve $y = 3x^2 - 8x + 6$
$y = 2 - x$

(_____, _____) and (_____, _____)

Solve $y = x^2 - 5$
$y = x + 6$

Give your answers correct to 2 decimal places.

(_____, _____) and (_____, _____)

Solve $x^2 + y^2 = 34$
$y = x + 2$

(_____, _____) and (_____, _____)

Solve $9x^2 + y^2 = 18$
$y = x + 4$

(_____, _____) and (_____, _____)

Solving Non-Linear Simultaneous Equations AMBER

Solve $y = 3x^2 - 8x + 6$
$y = 2 - x$

If they are both equal to y, they are equal to each other.

Manipulate equation so it equals 0.

Solve to find x.

Substitute to find corresponding y values.

Write as coordinates.

(_____, _____) and (_____, _____)

Solve $y = x^2 - 5$
$y = x + 6$

Give your answers correct to 2 decimal places.

(_____, _____) and (_____, _____)

Solve $x^2 + y^2 = 34$
$y = x + 2$

Substitute the second equation for y in the first equation.

Expand the brackets and manipulate equation so it equals 0.

Solve to find x.

Substitute to find corresponding y values.

Write as coordinates.

(_____, _____) and (_____, _____)

Solve $9x^2 + y^2 = 18$
$y = x + 4$

(_____, _____) and (_____, _____)

Solving Non-Linear Simultaneous Equations RED

Solve $y = 3x^2 - 8x + 6$
$y = 2 - x$

$3x^2 - 8x + 6 = 2 - x$
$3x^2 - 7x + 4 = 0$

$x =$

If they are both equal to y, they are equal to each other.

Manipulate equation so it equals 0.

Solve to find x.

Substitute to find corresponding y values.

Write as coordinates.

(_____, _____) and (_____, _____)

Solve $y = x^2 - 5$
$y = x + 6$

Give your answers correct to 2 decimal places.

(_____, _____) and (_____, _____)

Solve $x^2 + y^2 = 34$
$y = x + 2$

$x^2 + (x + 2)^2 = 34$
$x^2 + x^2 + 4x + 4 = 34$
$= 0$

Substitute the second equation for y in the first equation.

Expand the brackets and manipulate equation so it equals 0.

Solve to find x.

Substitute to find corresponding y values.

Write as coordinates.

(_____, _____) and (_____, _____)

Solve $9x^2 + y^2 = 18$
$y = x + 4$

(_____, _____) and (_____, _____)