ACCESS MATHS

Solve: $y = x^2 - 2x - 5$
$y = x - 1$

When both are equal to y, use the 'y=' method

Set both equations equal to each other

$$x^2 - 2x - 5 = x - 1$$

Rearrange to set equal to zero

-x

$$x^2 - 3x - 3 = 1$$

-1

$$x^2 - 3x - 4 = 0$$

Factorise!

$$(x - 4)(x + 1) = 0$$

Write your two solutions of 'x'

$$(x - 4)(x + 1) = 0$$

$$x = 4 \text{ and } x = -1$$

Sub your two solutions into 'y = x – 1'

When $x = 4$, $y = 4 - 1$
$y = 3$

When $x = -1$, $y = -1 - 1$
$y = -2$

$x = 4, y = 3$
$x = -1, y = -2$

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