Solving Equations by Completing the Square

Level 1 - Solve basic equations by Completing the Square

Level 2 - Solve equations involving fractions by Completing the Square

Level 3 - Solve by eliminating the algebraic fraction and then Completing the Square

Answers:

Level 1

a) $x = -5, -1$	**b)** $x = 1, 7$	**c)** $x = -6, -4$
d) $x = 2, 4$	**e)** $x = 3, 7$	**f)** $x = -1, 5$
g) $x = -3, -1$	**h)** $x = 1, 2$	**i)** $x = -4, -2$

Level 2

a) $x = -4, -1$	**b)** $x = -2, 5$	**c)** $x = -4, -3$
d) $x = \frac{7 \pm \sqrt{13}}{2}$	**e)** $x = \frac{3 \pm \sqrt{5}}{2}$	**f)** $x = \frac{5 \pm \sqrt{17}}{4}$
g) $x = -\frac{5}{2}, 3$	**h)** $x = -4 \pm \sqrt{26}$	**i)** $x = -4, 1$

Level 3

a) $x = \frac{1 \pm \sqrt{5}}{2}$	**b)** $x = \frac{3 \pm \sqrt{17}}{4}$
c) $x = \frac{1 \pm \sqrt{7}}{2}$	**d)** $x = \frac{-9 \pm \sqrt{29}}{2}$