

K Education Centre

GCSE Maths - Higher

Quadratic Equations

Assignment Questions

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Year 2023

Quadratic Equations

Q1 : Solve the following quadratic equations :

a) $(y-9)(y-4) = 0$

b) $x^2 - 3x = 4$

c) $25t^2 - 49 = 0$

d) $2y + \frac{5}{y} = 11$

Q2: Solve the following quadratic equations, give your answer to two decimal places.

a) $4x^2 + 5x = 3$

b) $x^2 - x - 10 = 0$

c) $x^2 = 7x + 4$

Q3: The sum of a number and its reciprocal is 2.05. What are the numbers?

Q4: How many solutions does the following equations has.

a) $25y^2 - 30y + 9$

b) $x^2 - 2x - 16 = 0$

c) $5x^2 + 5x + 3 = 0$

Q5: How many times the graph of $y^2 + 5y + 10 = 0$ meets the x axis.

Q6: Solve the equations by completing the square. Leave your answer in surd form where necessary.

a) $x^2 + 8x - 6 = 0$

b) $x^2 + 20x - 1 = 0$

c) $x^2 - 4x - 7 = 0$

d) $x^2 - 4x + 2 = 0$

e) $x^2 - 6x + 7 = 0$

Q7: Find the turning point of the following quadratic equations.

a) $x^2 + 6x + 7$

b) $y = x^2 + 8x + 22$

c) $y = x^2 - 10x + 16$

d) $y = -x^2 + 6x - 1$