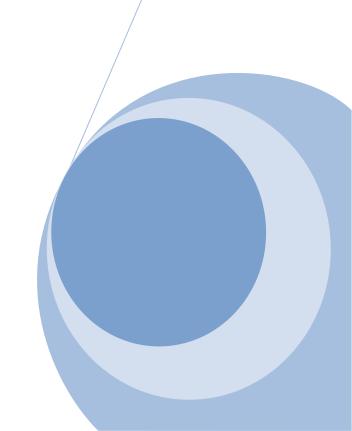


GCSE Maths - Higher

Quadratic Equations

Assignment Questions

©KEducationCentre Year 2023



Quadratic Equations

Q1: Solve the following quadratic equations:

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

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

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

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

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.

b)
$$5x^2 - 2x - 16 = 0$$

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

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

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

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

a)
$$\chi^2 + 8\chi - 6 = 0$$

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

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

c) $y = yc^2 - 10x + 16$
d) $y = -yc^2 + 6x - 1$