GCSE: The Quadratic Formula

This worksheet is designed to give you extra practice on the quadratic formula and using it to solve equations.

1 Using the quadratic formula, solve the following equations

(a)
$$x^2 + 3x + 2 = 0$$

(b)
$$x^2 - 3x + 2 = 0$$

(c)
$$x^2 - 16x - 80 = 0$$
 (d) $x^2 - 9 = 0$

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(e)
$$2x^2 + 6x - 7 = 0$$
 (f) $5x^2 - x = 8$

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(g)
$$x(x+2)=4$$

(h)
$$-x^2 + 5x + 10 = 0$$

(i)
$$4x^2 + 1 = 2(3-x)$$
 (j) $4x^2 - 1 = 0$

(i)
$$4x^2 - 1 = 0$$

(k)
$$(x+1)(x-2)=4$$
 (1) $7x^2-8x-10=0$

(1)
$$7x^2 - 8x - 10 = 0$$

In each case, give your answers to two decimal places where appropriate.

END OF WORKSHEET

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