N5 Maths: Factorising

Factorise each of the following expressions fully.

Q1 **a)** $16x - 12$ **b)** $5a^2 - 10a$ **c)** $x + 6x^2$

d) $9xy + 6x + 12y$ **e)** $12x^2 + 8x^3$ **f)** $14n^2 - 9n$

Q2 **a)** $x^2 - 25$ **b)** $x^2 - y^2$ **c)** $49 - y^2$

d) $9x^2 - 64$ **e)** $16 - 9y^2$ **f)** $36x^2 - 49y^2$

g) $3x^2 - 3y^2$ **h)** $2x^2 - 50$ **i)** $18x^2 - 32y^2$

Q3 **a)** $x^2 + 3x + 2$ **b)** $x^2 + 11x + 10$ **c)** $x^2 + 7x + 10$

d) $x^2 + 7x + 12$ **e)** $x^2 + 8x + 12$ **f)** $x^2 + 13x + 12$

Q4 **a)** $x^2 - 6x + 5$ **b)** $x^2 - 5x + 6$ **c)** $x^2 - 7x + 6$

d) $x^2 - 10x + 16$ **e)** $x^2 - 8x + 16$ **f)** $x^2 - 17x + 72$

Q5 **a)** $x^2 + 4x - 5$ **b)** $x^2 - x - 6$ **c)** $x^2 + 5x - 6$

d) $x^2 - 6x - 16$ **e)** $x^2 + 5x - 24$ **f)** $x^2 - 2x - 48$

Q6 **a)** $2x^2 + 7x + 3$ **b)** $2x^2 + 13x + 15$ **c)** $3x^2 + 5x + 2$

d) $6x^2 + 5x + 1$ **e)** $6x^2 + 17x + 5$ **f)** $30x^2 + 37x + 10$

g) $12x^2 + 25x + 12$ **h)** $28x^2 + 43x + 10$ **i)** $20x^2 + 96x + 27$

Q7 **a)** $2x^2 + 7x - 4$ **b)** $3x^2 - 5x + 2$ **c)** $5x^2 + x - 6$

d) $8x^2 - 10x + 3$ **e)** $6x^2 - 17x - 14$ **f)** $6x^2 - 59x - 10$

g) $16x^2 - 8x + 1$ **h)** $48x^2 - 22x - 15$ **i)** $28x^2 - 108x + 35$

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