

Solutions – Factorising Quadratics (A)

Fully factorise $2x^2 + 3x - 2$

$$(2x - 1)(x + 2)$$

Fully factorise $x^2 + 6x + 8$

$$(x + 4)(x + 2)$$

Fully factorise $x^2 + 12x + 20$

$$(x + 10)(x + 2)$$

Fully factorise $3x^2 + 21x + 30$

$$3(x + 2)(x + 5)$$

Fully factorise $2x^2 - 18x + 36$

$$2(x - 6)(x - 3)$$

Fully factorise $2x^2 - 20x + 48$

$$2(x - 4)(x - 6)$$

Solutions – Factorising Quadratics (B)

Fully factorise $4x^2 - 24x + 36$

$$4(x - 3)^2$$

Fully factorise $4x^2 + 29x + 30$

$$(4x + 5)(x + 6)$$

Fully factorise $x^2 + 3x + 2$

$$(x + 2)(x + 1)$$

Fully factorise $x^2 + 13x + 30$

$$(x + 10)(x + 3)$$

Fully factorise $4x^2 - 23x + 15$

$$(4x - 3)(x - 5)$$

Fully factorise $3x^2 + 3x - 18$

$$3(x - 2)(x + 3)$$

Solutions – Factorising Quadratics (C)

Fully factorise $5x^2 + 30x + 40$

$$5(x + 2)(x + 4)$$

Fully factorise $x^2 + 10x + 25$

$$(x + 5)^2$$

Fully factorise $5x^2 - 24x - 36$

$$(5x + 6)(x - 6)$$

Fully factorise $4x^2 - 9x - 28$

$$(4x + 7)(x - 4)$$

Fully factorise $2x^2 + 6x - 8$

$$2(x + 4)(x - 1)$$

Fully factorise $x^2 + 17x + 70$

$$(x + 10)(x + 7)$$

Solutions – Factorising Quadratics (D)

Fully factorise $4x^2 + 15x + 9$

$$(4x + 3)(x + 3)$$

Fully factorise $3x^2 + 9x + 6$

$$3(x + 1)(x + 2)$$

Fully factorise $x^2 + 9x + 14$

$$(x + 2)(x + 7)$$

Fully factorise $3x^2 + 18x + 15$

$$3(x + 1)(x + 5)$$

Fully factorise $x^2 + 13x + 40$

$$(x + 8)(x + 5)$$

Fully factorise $3x^2 - 21x + 36$

$$3(x - 4)(x - 3)$$

Solutions – Factorising Quadratics (E)

Fully factorise $5x^2 + 35x + 60$

$$5(x + 4)(x + 3)$$

Fully factorise $2x^2 + 14x + 24$

$$2(x + 3)(x + 4)$$

Fully factorise $x^2 + 7x + 10$

$$(x + 2)(x + 5)$$

Fully factorise $3x^2 - 12x + 9$

$$3(x - 3)(x - 1)$$

Fully factorise $x^2 + 7x + 6$

$$(x + 1)(x + 6)$$

Fully factorise $4x^2 + 3x - 7$

$$(4x + 7)(x - 1)$$

Solutions – Factorising Quadratics (F)

Fully factorise $x^2 + 19x + 90$

$$(x + 9)(x + 10)$$

Fully factorise $x^2 + 15x + 50$

$$(x + 5)(x + 10)$$

Fully factorise $3x^2 + 3x - 18$

$$3(x - 2)(x + 3)$$

Fully factorise $2x^2 + 14x + 24$

$$2(x + 3)(x + 4)$$

Fully factorise $6x^2 - 12x - 144$

$$6(x + 4)(x - 6)$$

Fully factorise $2x^2 - 7x + 5$

$$(2x - 5)(x - 1)$$

Solutions – Factorising Quadratics (G)

Fully factorise $4x^2 - 24x + 20$

$$4(x - 5)(x - 1)$$

Fully factorise $6x^2 + 29x - 42$

$$(6x - 7)(x + 6)$$

Fully factorise $x^2 + 13x + 30$

$$(x + 3)(x + 10)$$

Fully factorise $5x^2 + 15x - 90$

$$5(x + 6)(x - 3)$$

Fully factorise $6x^2 + 11x - 2$

$$(6x - 1)(x + 2)$$

Fully factorise $x^2 + 14x + 48$

$$(x + 8)(x + 6)$$

Solutions – Factorising Quadratics (H)

Fully factorise $2x^2 + 4x - 6$

$$2(x - 1)(x + 3)$$

Fully factorise $x^2 + 3x + 2$

$$(x + 1)(x + 2)$$

Fully factorise $5x^2 - 10x - 15$

$$5(x - 3)(x + 1)$$

Fully factorise $x^2 + 15x + 50$

$$(x + 5)(x + 10)$$

Fully factorise $2x^2 + 9x - 5$

$$(2x - 1)(x + 5)$$

Fully factorise $2x^2 + 20x + 42$

$$2(x + 3)(x + 7)$$

Solutions – Factorising Quadratics (I)

Fully factorise $5x^2 - 25x - 30$

$$5(x - 6)(x + 1)$$

Fully factorise $4x^2 - 19x - 5$

$$(4x + 1)(x - 5)$$

Fully factorise $x^2 + 9x + 14$

$$(x + 2)(x + 7)$$

Fully factorise $3x^2 - 14x - 49$

$$(3x + 7)(x - 7)$$

Fully factorise $5x^2 - 35x + 60$

$$5(x - 3)(x - 4)$$

Fully factorise $x^2 + 11x + 18$

$$(x + 2)(x + 9)$$

Solutions – Factorising Quadratics (J)

Fully factorise $x^2 + 13x + 40$

$$(x + 8)(x + 5)$$

Fully factorise $2x^2 - 16x + 32$

$$2(x - 4)^2$$

Fully factorise $4x^2 + 28x + 48$

$$4(x + 4)(x + 3)$$

Fully factorise $3x^2 + 30x + 72$

$$3(x + 6)(x + 4)$$

Fully factorise $x^2 + 7x + 10$

$$(x + 2)(x + 5)$$

Fully factorise $4x^2 + 21x - 49$

$$(4x - 7)(x + 7)$$