

Ex4

Factorise the following quadratic expression into double brackets.

$$x^2 - 2x - 80$$

Ex5

Factorise the following quadratic expression into double brackets.

$$x^2 - 7x - 8$$

Q3 Factorise the following quadratic expressions into double brackets.

[a] $x^2 - 6x - 16$

[b] $x^2 - 5x - 84$

[c] $x^2 - 6x - 72$

[d] $x^2 - 8x - 33$

[e] $x^2 - 2x - 15$

[f] $x^2 - 4x - 21$

[g] $x^2 - 8x - 9$

Q4 Factorise the following quadratic expressions into double brackets.

[a] $x^2 - 20x + 8x - 28$

[b] $x(x - 1) - 72$

[c] $x(x - 11) - 26$

[d] $x^2 - 4(x + 8)$

[e] $x^2 - 8(6 + x)$

Q5 Write the letter of the quadratic expression next to its factorised double bracket.

[a] $x^2 - 2x - 8$

[b] $x^2 - 4x - 45$

[c] $x^2 + 2x - 80$

[d] $x^2 - x - 6$

[e] $x^2 - 6x - 55$

[f] $x^2 + x - 20$

[g] $x^2 + 3x - 4$

Double brackets	Letter
$(x + 5)(x - 4)$	
$(x + 2)(x - 3)$	
$(x + 2)(x - 4)$	
$(x + 10)(x - 8)$	
$(x + 5)(x - 9)$	
$(x + 4)(x - 1)$	
$(x + 5)(x - 11)$	

Q6 Fill in the missing boxes to make the following true.

[a] $x^2 + x + 2x - \square = (x + 10)(x - 7)$

[b] $x^2 - \square(3x + 8) = (x + 2)(x - 8)$

[c] $x(x - \square) - 10 = (x + 2)(x - 5)$

[d] $x^2 - \square(24 - x) = (x + 12)(x - 8)$

[e] $x^2 - 5(\square x + 10) = (x - 5)(x - 10)$

[f] $x^2 + 4(x - 3) = (x + 6)(x - \square)$

[g] $x(x + 9) - 70 = (x \square)(x \square)$

Q7 Factorise the following quadratic expressions into double brackets.

[a] $x^2 + 2x - 3$

[b] $x^2 - 2x - 3$

[c] $x^2 - x - 12$

[d] $x^2 + x - 12$

[e] $x^2 - 11x - 12$

[f] $x^2 + 11x - 12$

[g] $x^2 + 8x - 20$

[h] $x^2 - 8x - 20$

[i] $x^2 + 6x - 27$

[j] $x^2 - 2x - 35$

[k] $x^2 - 2x - 99$

[l] $x^2 + 10x - 150$

[m] $x^2 + 9x - 36$

[n] $x^2 - 9x - 52$

[o] $x^2 - 7x - 30$

[p] $x^2 + 8x - 105$