# Factoriser

$A = x^2 - 3x + 2$

$= x^2 - 2x - x + 2$

$= x(x - 2) - (x - 2)$

$= (x - 2)(x - 1)$

$B = -9x^2 - 6x - 1$

$= -(9x^2 - 6x - 1)$

$= -(3x - 1)^2$

$C = -10 + (x + 5)^2 - 2x$

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

$= -2(5 + x) + (x + 5)^2$

$= (x + 5)[-2 + (x + 5)]$

$= (x + 5)(x + 3)$

$D = -2x^2 + x + 1$

$= -2x^2 + 2x - x + 1$

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

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

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

$E = x^2 + 2\sqrt{2}x + 2$

$F = x^2 - 2$

$G = 4x^2 - 12x + 8$

$H = x - (3x - 1)^3 + 2x - 1$

$I = (x^4 - 1)(x^2 + 2x + 1)$

$= [(x^2)^2 - 1^2](x^2 + 2x \times 1 + 1^2)$

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

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

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

$J = x^2 - 9 - (2x - 6)x + (x - 3)^2$

$K = (x - 11)^2 + (33 - 3x)(x + 2)$

$L = (2x - 1)x + (1 - 2x)^2 + (x - 1/2)(x - 3/2)$

$M = x^2(1 + 1/x) + 2(x + 1)^2$

$N = -0{,}3(2x - 3)^2 + 0{,}7x(1{,}5 - x)$

$O = 0{,}25x^2 - x + 1$

$P = x^2 - (x + 1)^2$

$Q = 5(1 - x)^2 - 45x^2$

$R = (x + 1)^2 - 2(x + 1) + 1$

$S = x^5 + 4x^4 + 4x^3$

$T = (5x - 1)(x + 3) + 3(25x^2 - 1)$

$U = 49 - 28x + 4x^2 + (7 - 2x)(5 - 3x)$

$V = x^2(x - 4) + 2x(x - 4) + x - 4$

$W = x^2 + 6x + 5$

$X = 3x^2 + 7x + 2$

$Y = -2x^2 - x + 1$

$Z = 2x^2 - 3x + 1$

$A' = x^3 + 3x^2 + 2x$

$B' = (4 - 3x)^2 - (x + 4)^2 + (x - 4)^2$