

Fill in the Blanks

Using the Factor Theorem

Cubic Expression	Is $(x - 1)$ a factor?	Is $(x - 2)$ a factor?	Is $(x + 1)$ a factor?	Is $(x + 3)$ a factor?	Factorised Expression
$x^3 + 2x^2 - 13x + 10$	Yes	Yes	No	No	$(x - 1)(x - 2)(x + 5)$
$x^3 - 5x^2 + 2x + 8$	No	Yes	Yes	No	$(x - 2)(x + 1)(x - 4)$
$x^3 - 2x^2 - 21x - 18$	No	No	Yes	Yes	$(x + 3)(x + 1)(x - 6)$
$x^3 + x^2 - 14x + 24$	No	Yes	No	Yes	$(x - 2)(x + 3)(x - 4)$
$x^3 - 10x^2 + 23x - 14$	Yes	Yes	No	No	$(x - 1)(x - 2)(x - 7)$
$x^3 + 8x^2 - x - 8$	Yes	No	Yes	No	$(x + 1)(x - 1)(x + 8)$
$x^3 - 4x^2 - 11x + 30$	No	Yes	No	Yes	$(x + 3)(x - 2)(x - 5)$
$x^3 - x^2 - 16x + 16$	Yes	No	No	No	$(x - 1)(x + 4)(x - 4)$
$x^3 + 3x^2 - 18x - 40$	No	No	No	No	$(x + 2)(x - 4)(x + 5)$
$x^3 - 8x^2 + 13x - 6$	Yes	No	No	No	$(x - 1)(x - 1)(x - 6)$
$2x^3 + 5x^2 - 23x + 10$	No	Yes	No	No	$(x - 2)(2x - 1)(x + 5)$