

12. Solve the following equations.

i) $12x^4 - 8x^3 - 83x^2 + 132x - 45 = 0.$

ii) $12x^4 - 5x^3 + 45x^2 - 20x - 12 = 0.$

iii) $16x^4 - 36x^3 - 40x^2 + 9x + 9 = 0.$

iv) $6x^6 - x^5 - 32x^4 + 5x^3 + 34x^2 - 4x - 8 = 0.$

i) $12x^4 - 8x^3 - 83x^2 + 132x - 45 = 0$

$x = -3$

$12x^3 - 44x^2 + 49x - 15 = 0$

$x = \frac{1}{2}$

$12x^2 - 38x + 30 = 0$

$D/4 = 361 - 360 = 1$

$x = (19 + 1)/12 = 5/3$

$x = (19 - 1)/12 = 3/2$

	12	-8	-83	132	-45
-3	12	-44	49	-15	0
1/2	12	-38	30	0	0