Использование Бинома Ньютона

1) $(x + 2)^3 + x^3 = 28$

2) $x^4 + (x - 1)^4 = 17$

	1	-2	3	-2	8
2	1	0	3	4	0

$x^3 + 3x + 4 = 0$

$x = -1$

		1	0	3	4
-1		1	-1	4	0

$x^2 - x + 4 = 0$

$x_1 x_2 = 4$

$x_1 + x_2 = -1$

$D = (1-16) = -15$

no answer

Answer : 2,-1

$(a+b)^3 = (a+b)(a+b)^2$

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$a^3 + 3a^2b + 3ab^2 + b^3$

$x^3 + 6x^2 + 12x + 8 + x^3 = 28$
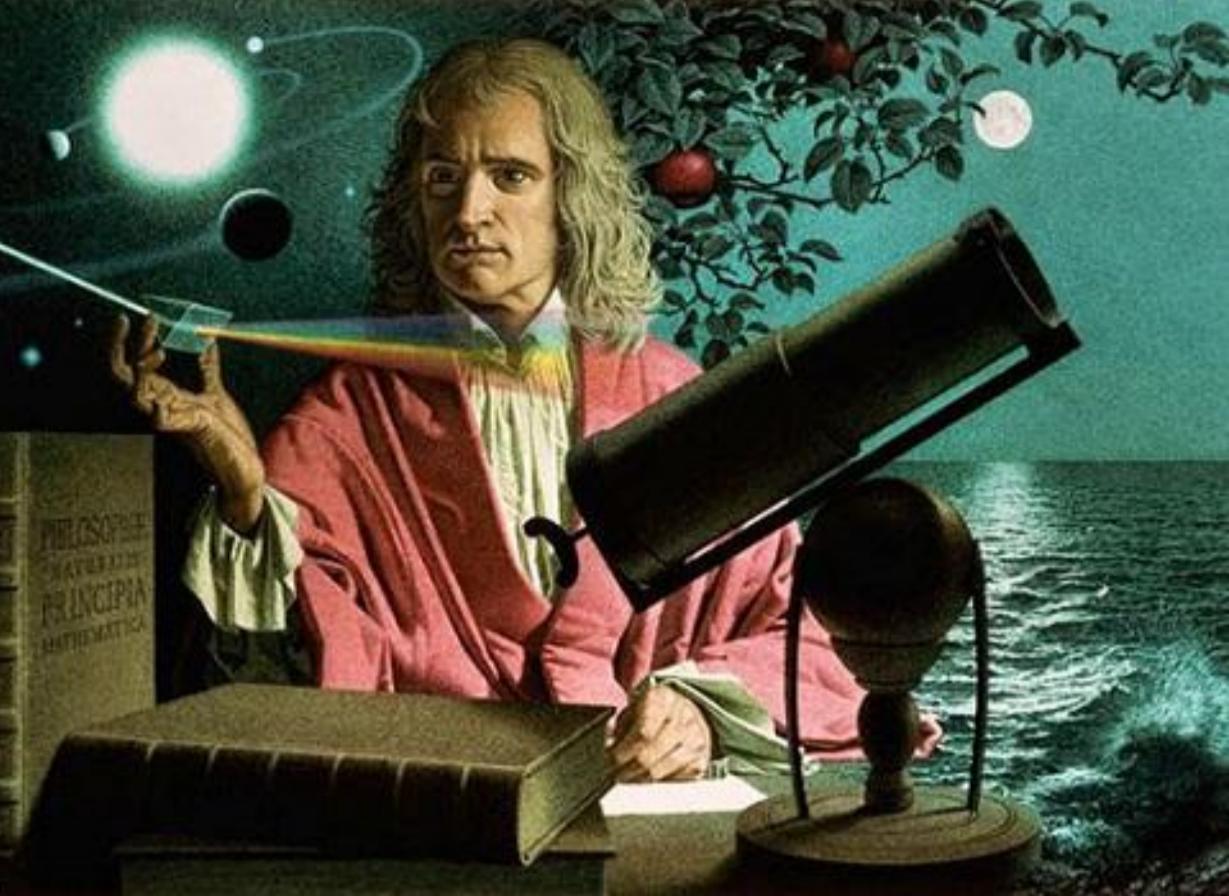
$2x^3 + 6x^2 + 12x = 20$

$x^3 + 3x^2 + 6x = 10$

$x^3 + 3x^2 + 6x - 10 = 0$

$x = 1$

$x^2 + 4x + 10 = 0$

$D^* = 4 - 10 = -6$

answer : 1

	1	3	6	-10
1	1	4	10	0

2) $x^4 + (x - 1)^4 = 17$

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$a^4 - 4a^3b + 6a^2b^2 - 4ab^3 + b^4$

$(x-1)^4 = x^4 - 4x^3 + 6x^2 - 4x + 1$

$x^4 + x^4 - 4x^3 + 6x^2 - 4x + 1 = 17$

$2x^4 - 4x^3 + 6x^2 - 4x - 16 = 0$

$x^4 - 2x^3 + 3x^2 - 2x - 8 = 0$ $x = 2$