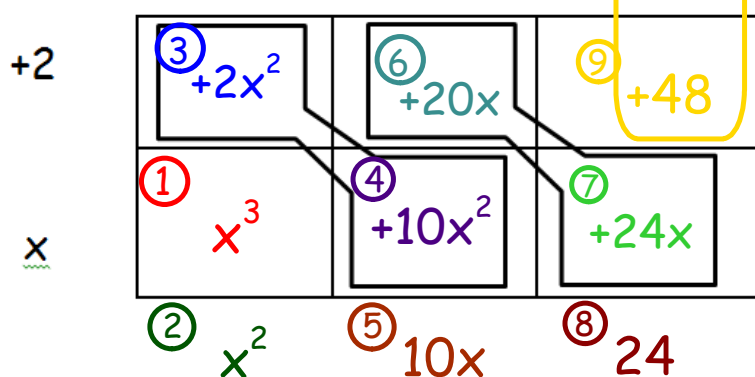


Standard form: $y = x^3 + 12x^2 + 44x + 48$

if we know one factor is $(x+2)$. OR $(-2, 0)$

$x = -2$ is a root.



Partially factored form: $y = (x+2)(x^2+10x+24)$

Partially factored form: $y = (x+2)(x^2+10x+24)$

+4	+4x	+24
x	x ²	+6x
	x	+6

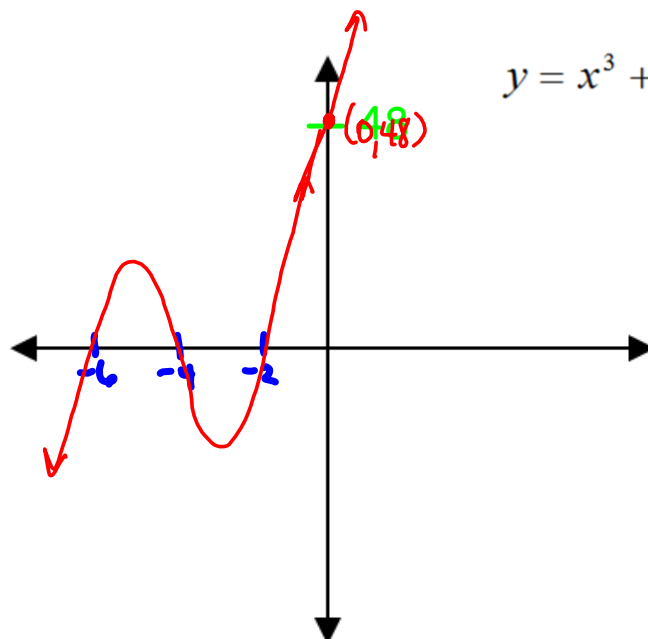
24x²	
6x	4x
10x	

Fully factored form: $y = (x+2)(x+4)(x+6)$

Fully factored form: $y = (x+2)(x+4)(x+6)$

Roots: $(-2,0) (-4,0) (-6,0)$

Sketch:



$$y = x^3 + 12x^2 + 44x + 48$$