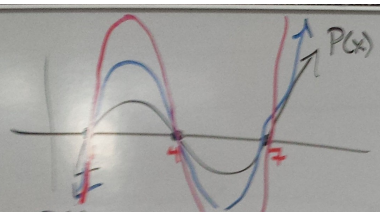

$P(x) = (x-1)(x-4)(x-7)$

another $P(x) = 2(x-1)(x-4)(x-7)$

another $P(x) = 3(x-1)(x-4)(x-7)$

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

$= 3(x^3 - 7x^2 + 35x - 28)$

$-5x^2 + 4x$

$= 3(x^3 - 12x^2 + 39x - 28)$

#14 write a polynomial fcn with zeros $x = -1, 0, 2$

(if a is a zero, then $x-a$ is a factor)

-1 is a zero:

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

0 is a zero:

$x - 0 = (x)$ factor

2 is a zero:

$(x-2)$ factor

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

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

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

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

possible $P(x) = 2x^3 - 2x^2 - 4x$

#11-13 find real zeros (no $\sqrt{-1}$)

- graphical, or
- analytical (algebraic)