

10. $f(x) = x^3 - 3x^2 - 10x + 24$ BY $x-2$

$$x^3 - 3x^2 - 10x + 24 = 0$$

$$x-2=0$$

FACTOR
(VERB)

RECALL
 $x^2 - 5x + 6 = 0$

$$(x-2)(x-3) = 0$$

FACTORS
(NOUNS)

$$x-2=0 \quad x-3=0$$

$$x=2 \quad x=3$$

ZEROS

"ANSWERS"

"ROOTS"

2 |

x^3	x^2	x	const
1	-3	-10	24
2			
1	-1	-12	0
x^2	x	const	

MEANS $x-2$ IS
A FACTOR

OR $x=2$ IS
A ZERO

$$x^2 - x - 12 = 0$$

$$(x-4)(x+3) = 0$$

$$x-4=0 \quad x+3=0$$

$$x=4 \quad x=-3$$

PSD

11. $x^3 - 3x^2 - 13x + 15 = 0$

$$x = -3$$

x^3	x^2	x	const
-3 1	-3	-13	15
-3			
1	-6	5	0
x^2	x	const	

$$x^2 - 6x + 5 = 0$$

$$(x-5)(x-1) = 0$$

$$x-5=0 \quad x-1=0$$

$$x=5 \quad x=1$$

PSD