

Pág 86, 26 d, e y f

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

$$\begin{array}{r|rrrr}
 & 1 & 2 & 1 & 0 \\
 0 & & 0 & 0 & 0 \\
 \hline
 & 1 & 2 & 1 & 0 \\
 -1 & & -1 & -1 & \\
 \hline
 & 1 & 1 & 0 & \\
 -1 & & -1 & & \\
 \hline
 & 1 & & & 0
 \end{array}$$

e) $3x^3 - 27x = 3x(x+3)(x-3)$

$$\begin{array}{r|rrrr}
 & 3 & 0 & -27 & 0 \\
 0 & & 0 & 0 & 0 \\
 \hline
 & 3 & 0 & -27 & 0 \\
 -3 & & -9 & 27 & \\
 \hline
 & 3 & -9 & 0 & \\
 3 & & 9 & & \\
 \hline
 & 3 & & & 0
 \end{array}$$

f) $3x^2 + 30x + 75 = 3(x+5)^2$

$$\begin{array}{r|rrr}
 & 3 & 30 & 75 \\
 -5 & & -15 & -75 \\
 \hline
 & 3 & 15 & 0 \\
 -5 & & -15 & \\
 \hline
 & 3 & & 0 \\
 \hline
 & & & \\
 \hline
 & & &
 \end{array}$$

28)

a) $x^3 + 2x^2 - x - 2 = (x-1)(x+1)(x+2)$

$$\begin{array}{r|rrrr}
 & 1 & 2 & -1 & -2 \\
 1 & & 1 & 3 & 2 \\
 \hline
 & 1 & 3 & 2 & 0 \\
 -1 & & -1 & -2 & \\
 \hline
 & 1 & 2 & 0 & \\
 -2 & & -2 & & \\
 \hline
 & 1 & & & 0
 \end{array}$$

b) $x^3 - 19x^2 + 34x = (x)(x-2)(x-17)$

	1	-19	34	0
0		0	0	0
	1	-19	34	0
2		2	-34	
	1	-17		0
17		17		
	1			0

29) Simplificar,

a) $\frac{x^2 + 2x}{3x^3 + 6x^2} = \frac{x(x+2)}{3x^2(x+2)} = \frac{x}{3x^2} = \frac{1}{3x}$

	1	2	0		3	6	0	0
0		0	0		0	0	0	0
	1	2	0		3	6	0	0
-2		-2			0	0	0	
	1		0		3	6	0	
					-2	-6		
					3		0	

b) $\frac{x^2 - 25}{x^2 - 10x + 25} = \frac{(x-5)(x+5)}{(x-5)^2} = \frac{x+5}{x-5}$

	1	0	-25		1	-10	25
5		5	25		5	5	-25
	1	5	0		1	-5	0
-5		-5			5	5	
	1		0		1		0

c) $\frac{20x^2 - 2x - 3}{x^2 - 6x + 9} = \frac{20x^2 - 2x - 3}{(x-3)^2}$

	20	-2	-3		1	-6	9
3		60	174		3	3	-9
	20	58	171		1	-3	0
					3	3	
					1		0