

Algebra II

p. 88, #10, 22, 25

10. $(x+2)^3$
 $(x+2)(x+2)(x+2)$
 $(x^2+4x+4)(x+2)$

	x^2	$4x$	4
x	x^3	$4x^2$	$4x$
$+2$	$2x^2$	$8x$	8

$$x^3 + 6x^2 + 12x + 8$$

22. $(x-y)(x^2-xy+y^2)$

	x^2	$-xy$	y^2
x	x^3	$-x^2y$	xy^2
$-y$	$-x^2y$	$+xy^2$	$-y^3$

$$x^3 - 2x^2y + 2xy^2 - y^3$$

23. $(2x+5y)(3x^2-4xy+2y^2)$

	$3x^2$	$-4xy$	$2y^2$
$2x$	$6x^3$	$-8x^2y$	$4xy^2$
$+5y$	$15x^2y$	$-20xy^2$	$10y^3$

$$6x^3 + 7x^2y - 16xy^2 + 10y^3$$

24. $(x^3+x^2+1)(x^2-x-5)$

	x^2	$-x$	-5
x^3	x^5	$-x^4$	$-5x^3$
x^2	x^4	$-x^3$	$-5x^2$
1	x^2	$-x$	-5

$$x^5 - 6x^3 - 4x^2 - x - 5$$

25. $(4x^2+3x+2)(3x^2+2x-1)$

	$3x^2$	$+2x$	-1
$4x^2$	$12x^4$	$8x^3$	$-4x^2$
$+3x$	$9x^3$	$6x^2$	$-3x$
$+2$	$6x^2$	$4x$	-2

$$12x^4 + 17x^3 + 8x^2 + x - 2$$