

HW: Given text p.185

#59-30 (1st column), 29, 34, 344

9.) $(b-8)(b-10)$

	b	-8	
b	b^2	$-8b$	$= -18b$
-10	$-10b$	$+80$	

$$= b^2 - 18b + 80$$

21.) $(a-b)(a+b)$

	a	$-b$	
a	a^2	$-ab$	$= 0$
$+b$	$+ab$	$-b^2$	

$$= a^2 - b^2$$

12.) $(12-r)(6+r)$

	12	$-r$	
6	72	$-6r$	$= 6r$
$+r$	$+12r$	$-r^2$	

$$= -r^2 + 6r + 72$$

OR

$$= 72 + 6r - r^2$$

24.) $(x-4y)(x+4y)$

	x	$-4y$	
x	x^2	$-4xy$	$= 0$
$+4y$	$+4xy$	$-16y^2$	

$$= x^2 - 16y^2$$

27.) $(r^2+5)(r^2-2)$

	r^2	$+5$	
r^2	r^4	$+5r^2$	$= 3r^2$
-2	$-2r^2$	-10	

$$= r^4 + 3r^2 - 10$$

15.) $(5a+9)(5a-9)$

	$5a$	$+9$	
$5a$	$25a^2$	$+45a$	$= 0$
-9	$-45a$	-81	

$$= 25a^2 - 81$$

30.) $(2c+1)(2c^2-3c+1)$

18.) $(2x+3)(2x-3)$

	$2x$	$+3$	
$2x$	$4x^2$	$+6x$	$= 0$
-3	$-6x$	-9	

$$= 4x^2 - 9$$

	$2c^2$	$-3c$	$+1$
$2c$	$4c^3$	$-6c^2$	$+2c$
$+1$	$+2c^2$	$-3c$	$+1$

$$= 4c^3 - 4c^2 - 1c + 1$$

$$29.) (x+2)(x^2+3x+5)$$

$$x^3 + 3x^2 + 5x$$

$$+ 2x^2 + 6x + 10$$

ans: $x^3 + 5x^2 + 11x + 10$

$$34.) (a+5)^3 = (a+5)(a+5)(a+5)$$

multiply 1st

	a	+5
a	a^2	$+5a$
+5	$+5a$	$+25$

$$= (a^2 + 10a + 25)(a+5)$$

	a^2	$+10a$	$+25$
a	a^3	$+10a^2$	$+25a$
+5	$+5a^2$	$+50a$	$+125$

ans: $a^3 + 15a^2 + 75a + 125$

$$44.) \begin{array}{r|rr} & 2x & -5 \\ x & 2x^2 & -5x \\ +7 & +14x & -35 \end{array} = 9x$$

area

$$A = lw$$

$$A = (2x-5)(x+7)$$

$$A = 2x^2 + 9x - 35$$