Unit 10 Objective 5 Remediation

Multiplying Two Binomials

When multiplying two binomials we use FOIL to remember the steps.

- F – Multiply the first terms in each parenthesis
- O – Multiply the outside terms
- I – Multiply the inside terms

} These are usually like terms and get added

- L – Multiply the last terms

Example One

Multiply: $(x+5)(x-3)$

F O I L

$x^2 - 3x + 5x - 15$

Add the OI

Answer: $x^2 + 2x - 15$

Example Two

Multiply: $(2x-3)(5x-1)$

F O I L

$10x^2 - 2x - 15x + 3$

Add the OI

Answer: $10x^2 - 17x + 3$

Example Three

Multiply: $(3x+5y)(x+4y)$

F O I L

$3x^2 + 12xy + 5xy + 20y^2$

Add the OI

Answer: $3x^2 + 17xy + 20y^2$

What Did They Say About the Man Who Drank Shellac?

Do each exercise below and find your answer in the set of answers to the right of that exercise. Write the letter of your answer in the box containing the number of that exercise.

(1)	$(x+4)(x+2)$	(H) $x^2-9x+18$	(N) x^2+4x+7
(2)	$(x+7)(x+1)$	(A) $x^2-11x+18$	(E) x^2+8x+7
(3)	$(x-6)(x-3)$	(S) $x^2-5x-28$	(D) $x^2-3x-28$
(4)	$(x+8)(x-2)$	(H) x^2+6x+8	(R) $x^2-2x+18$
(5)	$(x-7)(x+4)$	(A) $x^2+6x-16$	(L) $x^2+3x-16$
(6)	$(x-2)(x-9)$		

(7)	$(2u+4)(u+1)$	(L) $21u^2+30u-24$	(L) $2u^2+6u+4$
(8)	$(3u+7)(u-3)$	(V) $20u^2-14u+2$	(S) $21u^2+23u-24$
(9)	$(4u-2)(5u-1)$	(U) $3u^2+u-21$	(Y) $20u^2-52u+32$
(10)	$(2u+1)(9u-5)$	(O) $3u^2-2u-21$	(E) $18u^2-u-5$
(11)	$(7u-4)(3u+6)$	(T) $18u^2+2u-5$	(N) $20u^2-41u+32$
(12)	$(5u-8)(4u-4)$		

(13)	$(2x+y)(x+3y)$	(E) $8x^2+xy-3y^2$	(T) $12x^2-9xy-24y^2$
(14)	$(3x-y)(8x-y)$	(N) $8x^2-2xy-3y^2$	(H) $12x^2-12xy-24y^2$
(15)	$(2x+y)(4x-3y)$	(F) $2x^2+7xy+3y^2$	(A) $15x^2+9xy-8y^2$
(16)	$(5x-2y)(3x+4y)$	(R) $7x^2+8xy+6y^2$	(S) $7x^2+17xy+6y^2$
(17)	$(7x+3y)(x+2y)$	(I) $24x^2-11xy+y^2$	(I) $15x^2+14xy-8y^2$
(18)	$(6x+6y)(2x-4y)$		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18