Math II — Polynomial Operations   Name _____

What happened to Ray Floob after he fell off the Empire State Building?

Simplify each expression below. Circle the letter of each answer. Then rearrange the circled letters in each section to make a word. Write the words in order in the boxes at the bottom of the page. You will find the answer to the title question.

(1) $3x + 2(5x - 7)$	S $20x - 3$	Y $20x - 18$
(2) $9 - 3(2x - 4)$	E $13x - 14$	N $5x + 11$
(3) $8x - 6(3 - 2x)$	T $5x + 15$	H $-6x + 21$
(4) $-5 + 5(x + 4)$		

(5) $4(6n + 9) - 10n$	O $14n + 36$	S $19n + 36$
(6) $14 - 3(4n - 1)$	E $-12n + 13$	N $-12n + 17$
(7) $-8n - 8(-4 - 2n)$	W $8n + 32$	T $8n - 1$

(8) $7k - 2(3k + 1) - 9$	L $2k + 7$	C $-13k + 34$
(9) $-6 + 5(8 - k) - 8k$	A $-7k + 37$	I $-7k + 30$
(10) $k + 1 - 4(2k - 9)$	K $2k - 4$	L $k - 11$
(11) $-10k - 3 + 2(5 + 6k)$		

(12) $8 + 9x + 4(11 - 2x)$	A $14x + 30$	R $6x + 52$
(13) $-4(-2x - 7) + 6x - 7$	H $3x + 21$	M $x + 52$
(14) $9 - 3(-4 + 3x) + 12x$	T $3x + 6$	I $14x + 21$

(15) $5(2y - 4) + 2(y + 9)$	A $12y - 4$	X $12y - 2$

(16) $-4(3u - 1) + 7(3 - 2u)$	W $-42u + 9$	Y $-42u + 42$
(17) $6(-5u + 1) - 3(4u - 12)$	S $13u - 12$	D $-5u + 25$
(18) $3(-u - 5) + 8(2u + 1)$	R $13u - 7$	A $-26u + 25$

Why is a stick of gum like a sneeze?

For each exercise, multiply the two polynomials. Find your answer in the set of answers under the exercise. Cross out the letter above your answer. When you finish, the answer to the title question will remain.

(1) $(x + 3)(x + 5)$

(2) $(x + 2)(x + 9)$

(3) $(x - 8)(x + 1)$

(4) $(x - 3)(x - 6)$

(5) $(2x + 9)(x - 2)$

(6) $(3x + 1)(2x + 4)$

(7) $(4a - 7)(3a - 2)$

(8) $(2a + 5)(2a - 5)$

(9) $(6a - 1)(2a + 4)$

(10) $(a + 2b)(4a + b)$

(11) $(5a + 3b)(a - 4b)$

(12) $(3a - 8b)(2a - b)$

(13) $(n + 2)(n^2 + 5n - 3)$

(14) $(3n - 1)(2n^2 + 4n + 4)$

(15) $(2n + 3)(6n^2 - 2n + 1)$

(16) $(4n - 5)(n^2 - 7n - 2)$

(17) $(3n - 4)(4n^2 + 2n + 3)$

(18) $(n + 8)(6n^2 - n - 4)$

B	E	S	I	A	U	T	N	T	I	S	E	R	A	N	O	T	C	R	I	H	E	A	N	W	D
$x^2 - 7x - 8$	$x^2 + 8x + 15$	$6x^2 + 14x + 4$	$6x^2 + 7x + 4$	$x^2 - 9x + 18$	$x^2 + 11x + 18$	$x^2 - 13x + 18$	$2x^2 + 5x - 18$	$4a^2 + 9ab + 2b^2$	$6a^2 - 19ab + 8b^2$	$5a^2 - 11ab - 12b^2$	$12a^2 + 22a - 4$	$4a^2 - 25$	$4a^2 + 4ab + 3b^2$	$5a^2 - 17ab - 12b^2$	$12a^2 - 29a + 14$	$6n^3 + 47n^2 - 12n - 32$	$6n^3 + 44n^2 - 9n - 32$	$4n^3 - 33n^2 + 27n + 10$	$6n^3 + 10n^2 + 8n - 4$	$n^3 + 6n^2 + 9n - 6$	$12n^3 - 9n^2 - 2n - 12$	$12n^3 - 10n^2 + n - 12$	$n^3 + 7n^2 + 7n - 6$	$4n^3 - 30n^2 + 21n + 10$	$12n^3 + 14n^2 - 4n + 3$