

# What Did the Girl Mushroom Say About the Boy Mushroom After Their First Date?



For each exercise below, multiply the polynomial by the monomial. Find your answer in the set of answers under the exercise and notice the letter next to it. Write this letter in the box that contains the number of that exercise.

- (1)  $5(2n^2 + n)$
- (2)  $3n(8n^2 - 2n)$
- (3)  $n^2(4n - 3)$
- (4)  $-2n(4 + 5n^3)$
- (5)  $-6n^2(4n^2 - 9)$

Answers:

- (B)  $-24n^4 - 54n$
- (T)  $24n^3 - 4n$
- (R)  $-24n^4 + 54n^2$
- (U)  $4n^3 - 3n^2$
- (S)  $10n^2 + 5n$
- (L)  $24n^3 - 6n^2$
- (O)  $-8n - 6n^3$
- (A)  $-8n - 10n^4$

- (6)  $4a(a^2 - 2a + 3)$
- (7)  $-2a^2(9 - a - 4a^2)$
- (8)  $a^2b(a^2 - b^2)$
- (9)  $-3ab^2(a^3b^2 - 2a^2b)$
- (10)  $2ab(a^2 + 4ab - 3b^2)$

Answers:

- (M)  $4a^3 - 8a^2 + 10$
- (H)  $-18a^2 + 2a^3 + 8a^4$
- (E)  $2a^3b + 8a^2b^2 - 6ab^3$
- (I)  $2a^3b + 8ab^2 - 4ab$
- (A)  $a^4b - a^2b^3$
- (G)  $4a^3 - 8a^2 + 12a$
- (W)  $-18a^2 + 2a^3 + 6a^5$
- (L)  $-3a^4b^4 + 6a^3b^3$

- (11)  $x^2y(2x^2 - 4xy + y^2)$
- (12)  $-2xy^2(2x^4 - 5x^2y^2 - 3y^4)$
- (13)  $4x^3y(-x^2y + 2xy - 5xy^2)$
- (14)  $-x^2y^3(7xy^3 - x^2y^2 + 3x^3y)$
- (15)  $3x^2y^2(2x^4y^2 - 3x^2y - 1)$

Answers:

- (N)  $-4x^5y^2 + 10x^3y^4 + 6xy^6$
- (S)  $2x^4y - 4x^2y^3 + x^2y^4$
- (E)  $-4x^5y^2 + 8x^4y^2 - 20x^4y^3$
- (U)  $-4x^5y^2 + 10x^2y^4 - 20x^2y^3$
- (Y)  $2x^4y - 4x^3y^2 + x^2y^3$
- (F)  $6x^6y^4 - 9x^4y^3 - 3x^2y^2$
- (T)  $-7x^3y^6 + x^5y^4 - 3x^3y^4$
- (I)  $-7x^3y^6 + x^4y^5 - 3x^5y^4$

7	10	1	5	13	4	9	2	11	8	15	3	12	6	14
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# 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
$x^2 - 7x - 8$																									
$x^2 + 8x + 15$																									
$6x^2 + 14x + 4$																									
$x^2 - 9x + 18$																									
$x^2 + 11x + 18$																									
$x^2 - 13x + 18$																									
$2x^2 + 5x - 18$																									
$4a^2 + 9ab + 2b^2$																									
$5a^2 - 11ab - 12b^2$																									
$12a^2 + 22a - 4$																									
$4a^2 - 25$																									
$5a^2 - 17ab - 12b^2$																									
$6a^2 - 19ab + 8b^2$																									
$12a^2 - 29a + 14$																									
$6n^3 + 44n^2 - 9n - 32$																									
$4n^3 - 33n^2 + 27n + 10$																									
$n^3 + 6n^2 + 9n - 6$																									
$6n^3 + 10n^2 + 8n - 4$																									
$12n^3 - 9n^2 - 2n - 12$																									
$12n^3 - 10n^2 + n - 12$																									
$n^3 + 7n^2 + 7n - 6$																									
$12n^3 + 14n^2 - 4n + 3$																									