

# What Happens to a Dog Who Eats Table Scraps?

Simplify each expression below. Find your answer in the corresponding answer column and notice the letter next to it. Write this letter in the box that contains the number of that exercise.



- (H) 1  $(x^3)^2 = x^6$  (L)  $81x^2$
- (E) 2  $(x^4)^3 = x^{12}$  (T)  $125x^{11}$
- (G) 3  $(2x^2)^3 = 2^3 x^6 = 8x^6$  (S)  $-32x^{15}$
- 4  $(-4x^3)^2 = (-4)^2 x^6 = 16x^6$  (G)  $8x^6$
- 5  $(-3x^4)^3 = (-3)^3 x^{12} = -27x^{12}$  (E)  $-64x^4$
- 6  $(8x^5)^2 = 8^2 x^{10} = 64x^{10}$  (H)  $x^6$
- 7  $(-2x^3)^5 = (-2)^5 x^{15} = -32x^{15}$  (N)  $-12x^3$
- 8  $(4x)^3 = (4)^3 x^3 = 64x^3$  (S)  $64x^{10}$
- 9  $(-9x)^2 = (-9)^2 x^2 = 81x^2$  (E)  $x^{12}$
- 10  $x(2x^2)^3 = x(2^3 x^6) = 8x^7$  (P)  $64x^3$
- 11  $-3x(2x)^2 = -3x(2^2 x^2) = -12x^3$  (E)  $16x^6$
- 12  $x^2(5x^3)^3 = x^2(125x^9) = 125x^{11}$  (I)  $8x^7$
- 13  $-4x^2(-4x)^2 = -4x^2(16x^2) = -64x^4$  (T)  $-27x^{12}$

- 14  $(4a^2b^3)^2 = 4^2 a^4 b^6 = 16a^4 b^6$  (H)  $-a^6 b^6$
- 15  $(2a^4b)^3 = 2^3 a^{12} b^3 = 8a^{12} b^3$  (E)  $-a^{10} b^8$
- 16  $(-5a^3b^3)^2 = (-5)^2 a^6 b^6 = 25a^6 b^6$  (R)  $16a^4 b^6$
- 17  $(ab^5)^3 = a^3 b^{15}$  (N)  $a^8 b^9$
- 18  $(-a^2b^2)^3 = (-1)^3 a^6 b^6 = -1a^6 b^6$  (I)  $25a^6 b^6$
- 19  $(-8ab^4)^2 = (-8)^2 a^2 b^8 = 64a^2 b^8$  (S)  $18a^5 b^2$
- 20  $2a(3a^2b)^2 = 2a(9a^4 b^2) = 18a^5 b^2$  (U)  $27a^3 b^4$
- 21  $-b(5a^3b)^3 = -b(125a^9 b^3) = -125a^9 b^4$  (N)  $a^3 b^{15}$
- 22  $3ab(2ab^2)^4 = 3ab(16a^4 b^8) = 48a^5 b^9$  (I)  $64a^2 b^8$
- 23  $(ab^3)^2(a^2b)^3 = (a^2 b^6)(a^6 b^3) = a^8 b^9$  (O)  $48a^5 b^9$
- 24  $(-2ab^2)^2(-ab)^3 = (4a^2 b^4)(-a^3 b^3) = -4a^5 b^7$  (S)  $8a^{12} b^3$
- 25  $(3ab^2)(3ab)^2 = (3ab^2)(9a^2 b^4) = 27a^3 b^6$  (G)  $-4a^5 b^7$
- 26  $(-a^2b)^4(-a^2b^4) = (a^8 b^4)(-a^2 b^4) = -a^{10} b^8$  (T)  $-125a^9 b^4$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
H	E	G	E	T	S	S	P	L	I	N	T	E	R	S	I	N	H	I	S	T	O	N	G	U	E