

Why Are Babies Like Rings ?

Simplify each expression 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 that contains the number of that exercise.

① $\frac{n^9}{n^5}$	③ $\frac{2n^4}{n}$	(A) $2n^6$	(E) $2n^3$
② $\frac{1^{12}}{n^3}$	④ $\frac{6n^2}{3n^5}$	(H) n^9	(T) n^4
⑤ $\frac{x^3y^4}{x^2y}$	⑦ $\frac{8xy^2}{12x^3y^5}$	(R) $-4x^3$	(A) xy^3
⑥ $\frac{-8x^6y^2}{2x^3y^2}$	⑧ $\frac{20x^3y^8}{-5x^3y}$	(S) $-4y^4$	(T) $-4y^7$
⑨ $\frac{3a^5b^2}{9a^2b^5}$	⑪ $\frac{-24a^2b}{18ab^5}$	(E) $\frac{2}{3x^2y^3}$	(U) $\frac{2}{3xy^4}$
⑩ $\frac{-15a^2b^9}{-3ab}$	⑫ $\frac{30a^9b^2}{2a^6b^2}$	(I) $5ab^8$	(A) $15a^2$
⑬ $\frac{8u^4v^{10}}{-2u^2v^8}$	⑮ $\frac{-7u^2v^8}{uv^3}$	(L) $5ab^6$	(G) $15a^3$
⑭ $\frac{13u^7v^7}{26u^7v}$	⑯ $\frac{-9u^8v^2}{-6u^2v^6}$	(N) $-\frac{4a}{3b^4}$	(H) $\frac{a^3}{3b^3}$
⑰ $\frac{14k^9m^3}{2km^3}$	⑲ $\frac{-3k^5m^6}{k^4m^3}$	(B) $-7uv^5$	(S) $-4u^2v^2$
⑱ $\frac{4k^2m^2}{16k^5m^3}$	⑳ $\frac{12km^3}{-4m^3}$	(O) $-7uv^3$	(E) $-4u^7v^2$
		(T) $\frac{v^8}{2}$	(A) $\frac{3u^6}{2v^4}$
		(E) $-3k$	(L) $7k^6m$
		(D) $7k^8$	(R) $-3km^3$
		(O) $\frac{1}{4k^3m}$	(N) $\frac{1}{4km^2}$

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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.



① $(x^3)^2$	(L) $81x^2$	⑭ $(4a^2b^3)^2$	(H) $-a^6b^6$
② $(x^4)^3$	(T) $125x^{11}$	⑮ $(2a^4b)^3$	(E) $-a^{10}b^8$
③ $(2x^2)^3$	(S) $-32x^{15}$	⑯ $(-5a^3b^3)^2$	(R) $16a^4b^6$
④ $(-4x^3)^2$	(G) $8x^6$	⑰ $(ab^5)^3$	(N) a^6b^9
⑤ $(-3x^4)^3$	(E) $-64x^4$	⑱ $(-a^2b^2)^3$	(I) $25a^6b^6$
⑥ $(8x^5)^2$	(H) x^6	⑲ $(-8ab^4)^2$	(S) $18a^5b^2$
⑦ $(-2x^3)^5$	(N) $-12x^3$	⑳ $2a(3a^2b)^2$	(U) $27a^3b^4$
⑧ $(4x)^3$	(S) $64x^{10}$	㉑ $-b(5a^3b)^3$	(N) a^3b^{15}
⑨ $(-9x)^2$	(E) x^{12}	㉒ $3ab(2ab^2)^4$	(I) $64a^2b^8$
⑩ $x(2x^2)^3$	(P) $64x^3$	㉓ $(ab^3)^2(a^2b)^3$	(O) $48a^5b^9$
⑪ $-3x(2x)^2$	(E) $16x^6$	㉔ $(-2ab^2)^2(-ab)^3$	(S) $8a^{12}b^3$
⑫ $x^2(5x^3)^3$	(I) $8x^7$	㉕ $(3ab^2)(3ab)^2$	(G) $-4a^5b^7$
⑬ $-4x^2(-4x)^2$	(T) $-27x^{12}$	㉖ $(-a^2b)^4(-a^2b^4)$	(T) $-125a^9b^4$

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What Was Unusual About the Horse-breeding Magazine?

Find the simplest form for each expression below in the adjacent answer column. The letter of the exercise goes in the box that contains the number of the corresponding answer.

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| (Y) $x^3 \cdot x^4$ | (20) $-3x^6$ | (E) $(u^2v)(-6uv^2)$ | (22) $-8u^6v^4$ |
| (I) $3x^2 \cdot x$ | (3) $3x^3$ | (L) $v(uv^2)(u^3v)$ | (17) u^4v^4 |
| (O) $2x^2 \cdot 3x$ | (11) x^9 | (I) $(4uv)(-u)(2u^4v)$ | (1) $-8u^6v^2$ |
| (U) $x \cdot x^2 \cdot x^3$ | (18) x^7 | (C) $(-3u^2)(-u^2v^2)(2uv)$ | (14) u^3v^7 |
| (E) $x^4(-3x^2)$ | (7) x^6 | (D) $(-u^2)(-6u^2v^3)(-u^3v^4)$ | (5) $6u^5v^3$ |
| (T) $(-2x^2)(-2x)$ | (2) $4x^3$ | (T) $(-2u)(u^2v)(4u^3v^3)$ | (9) $-6u^3v^3$ |
| (A) $x(-x^4)(-x^4)$ | (26) $6x^3$ | (N) $(\frac{1}{2}u^2v^3)(2uv^4)$ | (8) $-6u^7v^7$ |

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| (D) $(ab^2)(a^2b)$ | (15) $5a^6b^4$ | (L) $(-b^2)(9a^2b^3)$ | (28) $-a^3b^5c^2$ |
| (O) $(3ab)(2a^3b)$ | (10) a^3b^3 | (M) $(3a^2c)(-3bc^2)$ | (25) $-ab^3c^2$ |
| (E) $ab(-4ab^3)$ | (24) $12a^2b^8$ | (C) $c(-ab)(a^2b^2c^2)$ | (19) $-a^3b^3c^3$ |
| (T) $(-a^4b)(-5a^2b^3)$ | (23) $-4a^2b^4$ | (H) $(-3a^2c)(-3b^2c)$ | (21) $9a^3b^3c^5$ |
| (A) $(-2a^3b)(2ab^3)$ | (4) $-12a^3b^7$ | (L) $(-ab)(-b^2c^2)(-a^2b^2)$ | (12) $-9a^2bc^3$ |
| (N) $(6a^2b^2)(-2ab^5)$ | (27) $-4a^4b^4$ | (N) $(a^2bc^2)(b^2c^3)(9a)$ | (6) $-9a^2b^5$ |
| (R) $(-4ab^4)(-3ab^4)$ | (13) $6a^4b^2$ | (F) $(3b^2)(\frac{1}{3}abc)(-c)$ | (16) $9a^2b^2c^2$ |

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Why Couldn't the Chicken Find Her Egg?

Simplify each expression and find your answer below. Cross out the box containing your answer. When you finish, there will be six boxes not crossed out. Print the letters from these boxes in the squares at the bottom of the page.



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| (1) $(4x^2y)(2xy^2)$ | (7) $(4xy^2)(x^3y)^2$ | (13) $(-1)^3(5x^2y)^3$ |
| (2) $x^2(3xy)(xy^4)$ | (8) $(-x^4y)(3xy^3)^2$ | (14) $(2x)^4(-x^2)(-y)^2$ |
| (3) $(-4x^3y)(x^2y^2)(y)$ | (9) $(5x^2y)^2(2xy^3)$ | (15) $(-3x^2y^2)(-3xy)^2$ |
| (4) $(5xy^3)^2$ | (10) $(-xy)^2(-xy^2)$ | (16) $(7x^6y^4)(x^3y^2)^2$ |
| (5) $(-3x^2y)^3$ | (11) $3(x^2y)^2(xy^2)^4$ | (17) $7x^6y^4 + (x^3y^2)^2$ |
| (6) $(6x^2)(2x)^3$ | (12) $(-2x^2)^3(-y)^5$ | (18) $x^2(xy^3)^2 + y^2(x^2y^2)^2$ |

IT $-4x^5y^4$	TH $7x^{12}y^8$	SH $7x^{10}y^9$	EL $-x^3y^4$	EE $2x^4y^6$	OW $8x^3y^3$	EM $16x^4y^3$	IX $3x^8y^{10}$
GG $8x^6y^4$	IS $-4x^6y^3$	OS $50x^5y^5$	YO $48x^5$	AT $8x^6y^5$	LK $4x^7y^4$	LA $4x^6y^6$	TE $-125x^6y^3$
SD $25x^2y^6$	TH $-9x^6y^7$	ID $-x^5y^8$	LO $-27x^4y^4$	QU $3x^4y^5$	IT $3x^7y^{12}$	ST $-16x^6y^2$	EN $-27x^6y^3$