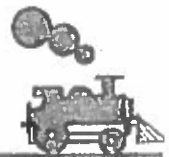




# Why Was the Engineer Driving the Train Backwards?



Find the missing factor in each exercise below. Find your answer in the set of answers to the right of that exercise. Write the letter next to your answer in the box containing the number of that exercise.

*this is the answer*

*what would you have to multiply  $x^5$  by to get  $x^8$ ?*

- (H) ①  $x^8 = (x^5)(x^3)$       (T)  $4x^5$       (N)  $x^6$   
 (O) ②  $24x^5 = (6x^2)(4x^3)$       (A)  $-5x^5$       (O)  $4x^3$   
 (I) ③  $-12x^4 = (3x^3)(-4x)$       (H)  $x^3$       (R)  $-4x^8$   
 (A) ④  $20x^7 = (-4x^2)(-5x^5)$       (E)  $-5x^3$       (I)  $-4x$

- (E) ⑤  $a^5b^8 = (a^2b^3)(a^3b^5)$       (P)  $a^2b^2$       (E)  $a^3b^5$   
 (O) ⑥  $4a^2b^6 = (2ab^2)(2ab^4)$       (V)  $5a^3b^3$       (A)  $-12a^2b^4$   
 (V) ⑦  $-15a^7b^4 = (-3a^4b)(5a^3b^3)$       (L)  $2ab^7$       (H)  $-12a^5b$   
 (H) ⑧  $72a^{10}b^3 = (-6a^5b^2)(-12a^5b)$       (O)  $2ab^4$       (K)  $5a^5b^3$

- (A) ⑨  $x^5y^3 = (x^2)(x^3y^3)$       (V)  $-3y^4$       (O)  $3x^2y^6$   
 (O) ⑩  $-6x^2y^7 = (-2y)(3x^2y^6)$       (L)  $-2x^7$       (T)  $3x^2y^3$   
 (L) ⑪  $14x^9y^6 = (-7x^2y^6)(-2x^7)$       (S)  $-2x^6y$       (A)  $x^3y^3$   
 (E) ⑫  $27x^4y^3 = (9x^4y)(3y^2)$       (B)  $x^2y^4$       (E)  $3y^2$

- (T) ⑬  $-3u^4v^2 = (u^2v)(-3u^2v)$       (R)  $-2uv^6$       (R)  $-3u^2v^4$   
 (D) ⑭  $32uv^5 = (-16v^2)(-2uv^3)$       (M)  $11v^2$       (C)  $-3u^2v^{11}$   
 (M) ⑮  $121u^2v^3 = (11u^2v)(11v^2)$       (P)  $11uv^3$       (E)  $3u^2v^6$   
 (C) ⑯  $-6u^3v^{12} = (2uv)(-3u^2v^{11})$       (T)  $-3u^2v$       (D)  $-2uv^3$

8	12	1	9	14	4	11	2	16	6	15	10	13	3	7	5
H	E	H	A	D	A	L	O	C	O	M	O	T	I	V	E