


BELIEVE IT OR NOT

In 1987, in the country of Australia, 46 people piled onto one of these vehicles and rode on it for one mile. What were they riding?

Simplify the problems. Find each answer in the list provided, and circle the corresponding letter. Unscramble the circled letters to discover the answer to the amazing fact.

 **Tip:** When solving multiplication problems involving exponents, remember $a^m \cdot a^n = a^{m+n}$, $(a^m)^n = a^{m \cdot n}$, and $(ab)^m = a^m \cdot b^m$. Don't forget to apply the exponents to both parts of a variable term. For example, $3x^2(2x^2)^3 \rightarrow 3x^2(2^3x^6) \rightarrow 3x^2 \cdot 8x^6 \rightarrow 24x^{2+6} \rightarrow 24x^8$.

1. $3^2 \cdot 3^4$

6. $7x^3(2x^4)^3$

2. $(x^3)^5$

7. $(-6x)^2$

3. $(-4x^2)^3$

8. $(3x)^4 \cdot x$

4. $x \cdot x^7$

9. $[(7 + x)^4]^3$

5. $(4 \cdot 3)^2$

10. $(2x^2)^3(-x^4)$

(U) 3^8	(Y) x^{15}	(M) x^8	(O) $56x^{15}$	(C) $-8x^{10}$	(E) $36x^2$
(T) 144	(C) $81x^5$	(I) $-8x^3$	(N) $-9x^8$	(G) $(7 + x)^7$	(B) $3x^4$
(W) $3x^{10}$	(S) $64x^4$	(H) -24^{10}	(R) $(7 + x)^{12}$	(O) $-64x^6$	(L) 3^6

Answer: _____