Name_____ Date_____ Per_____

Simplifying Exponential Expressions Class Assignment

What happens when you throw a red rock into the Black Sea?

Solve each problem and find the answer in the right column. Write the letter of the answer in the bottom grid that matches the problem number. There will be four spaces in the answer. You need to darken those spaces.

Questions

1	$3x \cdot 6x^4$	12	$3x^5 \cdot -2x^{-3}$
2	$(3x^2)^4$	13	$\frac{24x^5}{18x^7}$
3	$\frac{6x^4}{8x^2}$	14	$3x^3 \cdot 8x \cdot x$
4	$\frac{8^3x^4}{8^{11}x^2}$	15	$(3^2x^3)^2$
5	$\frac{-8x^5}{2x^{10}}$	16	$-6x^{-7} \cdot x^3$
6	$(8x^3)^2$	17	$-4x^5 \cdot x^3$
7	$(6x^3)^0$	18	$2x^{-6} \cdot 3x^{-2}$
8	$8^3x^4 \cdot 8^5x^2$	19	$-3x^2 \cdot 8x^{-6}$
9	$6^4x^3 \cdot 6^2x^0$	20	$(x^4)^{-2}$
10	$8x^3 \cdot x^{-9}$	21	$\frac{18x^6}{-3x^9}$
11	$\frac{3x^4}{-6x^6}$	22	$2x^4 \cdot 4x^{-6}$

Answers

darken space	$24x^5$	N	3^4x^6
darken space	$-4x^8$	O	6^6x^3
darken space	$-6x^2$	O	$\frac{-4}{x^5}$
darken space	$\frac{1}{-2x^2}$	O	1
B	$\frac{-6}{x^3}$	S	$\frac{6}{x^8}$
E	$\frac{-24}{x^4}$	S	8^2x^6
H	$\frac{3x^2}{4}$	T	3^4x^8
I	$\frac{1}{x^8}$	T	$\frac{8}{x^2}$
I	$\frac{x^2}{8^8}$	T	8^8x^6
K	$18x^5$	T	$\frac{-6}{x^4}$
M	$\frac{4}{3x^2}$	T	$\frac{8}{x^6}$

4	10	14	6	20	15	1	18	11	22	5	17	8	3	19	12	21	9	16	2	7	13