Number Correct: _____

Equivalent Expressions in Exponential Notation – Round 1

Directions: Rewrite each item as an equivalent expression in exponential notation. All letters denote numbers.

1.	$2^2 \cdot 2^3 =$	
2.	$2^2 \cdot 2^4 =$	
3.	$2^2 \cdot 2^5 =$	
4.	$3^7 \cdot 3^1 =$	
5.	$3^8 \cdot 3^1 =$	
6.	$3^9 \cdot 3^1 =$	
7.	$7^6 \cdot 7^2 =$	
8.	$7^6 \cdot 7^3 =$	
9.	$7^6 \cdot 7^4 =$	
10.	$11^{15} \cdot 11 =$	
11.	$11^{16} \cdot 11 =$	
12.	$2^{12} \cdot 2^2 =$	
13.	$2^{12} \cdot 2^4 =$	
14.	$2^{12} \cdot 2^6 =$	
15.	$99^5 \cdot 99^2 =$	
16.	$99^6 \cdot 99^3 =$	
17.	$99^7 \cdot 99^4 =$	
18.	$5^8 \cdot 5^2 =$	
19.	$6^8 \cdot 6^2 =$	
20.	$7^8 \cdot 7^2 =$	
21.	$r^8 \cdot r^2 =$	
22.	$s^8 \cdot s^2 =$	

23.	$6^3 \cdot 6^2 =$	
24.	$6^2 \cdot 6^3 =$	
25.	$-8^{\ 3} \cdot -8^{\ 7} =$	
26.	$-8^{\ 7} \cdot -8^{\ 3} =$	
27.	$0.2^{\ 3} \cdot 0.2^{\ 7} =$	
28.	$0.2^{\ 7} \cdot 0.2^{\ 3} =$	
29.	$-2^{\ 12} \cdot -2^{\ 1} =$	
30.	$-2.7^{\ 12} \cdot -2.7^{\ 1} =$	
31.	$1.1^6 \cdot 1.1^9 =$	
32.	$57^6 \cdot 57^9 =$	
33.	$x^6 \cdot x^9 =$	
34.	$2^7 \cdot 4 =$	
35.	$2^7 \cdot 4^2 =$	
36.	$2^7 \cdot 16 =$	
37.	$16 \cdot 4^3 =$	
38.	$3^2 \cdot 9 =$	
39.	$3^2 \cdot 27 =$	
40.	$3^2 \cdot 81 =$	
41.	$5^4 \cdot 25 =$	
42.	$5^4 \cdot 125 =$	
43.	$8 \cdot 2^9 =$	
44.	$16 \cdot 2^9 =$	

Equivalent Expressions in Exponential Notation – Round 1 [KEY]

Directions: Rewrite each item as an equivalent expression in exponential notation. All letters denote numbers.

1.	$2^2 \cdot 2^3 =$	2^5
2.	$2^2 \cdot 2^4 =$	2^6
3.	$2^2 \cdot 2^5 =$	2^7
4.	$3^7 \cdot 3^1 =$	3^8
5.	$3^8 \cdot 3^1 =$	3^9
6.	$3^9 \cdot 3^1 =$	3^{10}
7.	$7^6 \cdot 7^2 =$	7^8
8.	$7^6 \cdot 7^3 =$	7^9
9.	$7^6 \cdot 7^4 =$	7^{10}
10.	$11^{15} \cdot 11 =$	11^{16}
11.	$11^{16} \cdot 11 =$	11^{17}
12.	$2^{12} \cdot 2^2 =$	2^{14}
13.	$2^{12} \cdot 2^4 =$	2^{16}
14.	$2^{12} \cdot 2^6 =$	2^{18}
15.	$99^5 \cdot 99^2 =$	99^7
16.	$99^6 \cdot 99^3 =$	99^9
17.	$99^7 \cdot 99^4 =$	99^{11}
18.	$5^8 \cdot 5^2 =$	5^{10}
19.	$6^8 \cdot 6^2 =$	6^{10}
20.	$7^8 \cdot 7^2 =$	7^{10}
21.	$r^8 \cdot r^2 =$	r^{10}
22.	$s^8 \cdot s^2 =$	s^{10}
23.	$6^3 \cdot 6^2 =$	6^5
24.	$6^2 \cdot 6^3 =$	6^5
25.	$-8^{\ 3} \cdot -8^{\ 7} =$	$-8^{\ 10}$
26.	$-8^{\ 7} \cdot -8^{\ 3} =$	$-8^{\ 10}$
27.	$0.2^{\ 3} \cdot 0.2^{\ 7} =$	$0.2^{\ 10}$
28.	$0.2^{\ 7} \cdot 0.2^{\ 3} =$	$0.2^{\ 10}$
29.	$-2^{\ 12} \cdot -2^{\ 1} =$	$-2^{\ 13}$
30.	$-2.7^{\ 12} \cdot -2.7^{\ 1} =$	$-2.7^{\ 13}$
31.	$1.1^6 \cdot 1.1^9 =$	1.1^{15}
32.	$57^6 \cdot 57^9 =$	57^{15}
33.	$x^6 \cdot x^9 =$	x^{15}
34.	$2^7 \cdot 4 =$	2^9
35.	$2^7 \cdot 4^2 =$	2^{11}
36.	$2^7 \cdot 16 =$	2^{11}
37.	$16 \cdot 4^3 =$	4^5
38.	$3^2 \cdot 9 =$	3^4
39.	$3^2 \cdot 27 =$	3^5
40.	$3^2 \cdot 81 =$	3^6
41.	$5^4 \cdot 25 =$	5^6
42.	$5^4 \cdot 125 =$	5^7
43.	$8 \cdot 2^9 =$	2^{12}
44.	$16 \cdot 2^9 =$	2^{13}

Number Correct: _____
Improvement: _____

Equivalent Expressions in Exponential Notation – Round 2

Directions: Rewrite each item as an equivalent expression in exponential notation. All letters denote numbers.

1.	$5^2 \cdot 5^3 =$	
2.	$5^2 \cdot 5^4 =$	
3.	$5^2 \cdot 5^5 =$	
4.	$2^7 \cdot 2^1 =$	
5.	$2^8 \cdot 2^1 =$	
6.	$2^9 \cdot 2^1 =$	
7.	$3^6 \cdot 3^2 =$	
8.	$3^6 \cdot 3^3 =$	
9.	$3^6 \cdot 3^4 =$	
10.	$7^{15} \cdot 7 =$	
11.	$7^{16} \cdot 7 =$	
12.	$11^{12} \cdot 11^2 =$	
13.	$11^{12} \cdot 11^4 =$	
14.	$11^{12} \cdot 11^6 =$	
15.	$23^5 \cdot 23^2 =$	
16.	$23^6 \cdot 23^3 =$	
17.	$23^7 \cdot 23^4 =$	
18.	$13^7 \cdot 13^3 =$	
19.	$15^7 \cdot 15^3 =$	
20.	$17^7 \cdot 17^3 =$	
21.	$x^7 \cdot x^3 =$	
22.	$y^7 \cdot y^3 =$	

23.	$7^3 \cdot 7^2 =$	
24.	$7^2 \cdot 7^3 =$	
25.	$-4^{\ 3} \cdot -4^{\ 11} =$	
26.	$-4^{\ 11} \cdot -4^{\ 3} =$	
27.	$0.2^{\ 3} \cdot 0.2^{\ 11} =$	
28.	$0.2^{\ 11} \cdot 0.2^{\ 3} =$	
29.	$-2^{\ 9} \cdot -2^{\ 5} =$	
30.	$-2.7^{\ 5} \cdot -2.7^{\ 9} =$	
31.	$3.1^6 \cdot 3.1^6 =$	
32.	$57^6 \cdot 57^6 =$	
33.	$z^6 \cdot z^6 =$	
34.	$4 \cdot 2^9 =$	
35.	$4^2 \cdot 2^9 =$	
36.	$16 \cdot 2^9 =$	
37.	$16 \cdot 4^3 =$	
38.	$9 \cdot 3^5 =$	
39.	$3^5 \cdot 9 =$	
40.	$3^5 \cdot 27 =$	
41.	$5^7 \cdot 25 =$	
42.	$5^7 \cdot 125 =$	
43.	$2^{11} \cdot 4 =$	
44.	$2^{11} \cdot 16 =$	

Equivalent Expressions in Exponential Notation – Round 2 [KEY]

Directions: Rewrite each item as an equivalent expression in exponential notation. All letters denote numbers.

1.	$5^2 \cdot 5^3 =$	5^5
2.	$5^2 \cdot 5^4 =$	5^6
3.	$5^2 \cdot 5^5 =$	5^7
4.	$2^7 \cdot 2^1 =$	2^8
5.	$2^8 \cdot 2^1 =$	2^9
6.	$2^9 \cdot 2^1 =$	2^{10}
7.	$3^6 \cdot 3^2 =$	3^8
8.	$3^6 \cdot 3^3 =$	3^9
9.	$3^6 \cdot 3 =$	3^{10}
10.	$7^{15} \cdot 7 =$	7^{16}
11.	$7^{16} \cdot 7 =$	7^{17}
12.	$11^{12} \cdot 11^2 =$	11^{14}
13.	$11^{12} \cdot 11^4 =$	11^{16}
14.	$11^{12} \cdot 11^6 =$	11^{18}
15.	$23^5 \cdot 23^2 =$	23^7
16.	$23^6 \cdot 23^3 =$	23^9
17.	$23^7 \cdot 23^4 =$	23^{11}
18.	$13^7 \cdot 13^3 =$	13^{10}
19.	$15^7 \cdot 15^3 =$	15^{10}
20.	$17^7 \cdot 17^3 =$	17^{10}
21.	$x^7 \cdot x^3 =$	x^{10}
22.	$y^7 \cdot y^3 =$	y^{10}

23.	$7^3 \cdot 7^2 =$	7^5
24.	$7^2 \cdot 7^3 =$	7^5
25.	$-4^{\ 3} \cdot -4^{\ 11} =$	$-4^{\ 14}$
26.	$-4^{\ 11} \cdot -4^{\ 3} =$	$-4^{\ 14}$
27.	$0.2^{\ 3} \cdot 0.2^{\ 11} =$	$0.2^{\ 14}$
28.	$0.2^{\ 11} \cdot 0.2^{\ 3} =$	$0.2^{\ 14}$
29.	$-2^{\ 9} \cdot -2^{\ 5} =$	$-2^{\ 14}$
30.	$-2.7^{\ 5} \cdot -2.7^{\ 9} =$	$-2.7^{\ 14}$
31.	$3.1^6 \cdot 3.1^6 =$	3.1^{12}
32.	$57^6 \cdot 57^6 =$	57^{12}
33.	$z^6 \cdot z^6 =$	z^{12}
34.	$4 \cdot 2^9 =$	2^{11}
35.	$4^2 \cdot 2^9 =$	2^{13}
36.	$16 \cdot 2^9 =$	2^{13}
37.	$16 \cdot 4^3 =$	4^5
38.	$9 \cdot 3^5 =$	3^7
39.	$3^5 \cdot 9 =$	3^7
40.	$3^5 \cdot 27 =$	3^8
41.	$5^7 \cdot 25 =$	5^9
42.	$5^7 \cdot 125 =$	5^{10}
43.	$2^{11} \cdot 4 =$	2^{13}
44.	$2^{11} \cdot 16 =$	2^{15}