

Exponent Worksheets

Directions: Simplify each expression using the laws of exponents. Use the least number of bases possible and only positive exponents. 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.	$2^{11} \cdot 16 =$	

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Directions: Simplify each expression using the laws of exponents. Use the least number of bases possible and only positive exponents. 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}

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