	Solving Using the Laws of Exponents	Name:	
Solve each problem	n using the laws of exponents.		Answers
1) $3^1 =$	=		
			1
			2
2) $(2^3)^2 =$	=		
(2)	·		3
			4
3) $(2 - 2)^2 -$			4
$(2 \times 3) =$	=		5
			6
4) $2^2 \times 2^{-4} =$	=		7
_			8
5) $(\frac{1}{3})^2 =$	=		9
			10
6) $3^{-2} =$	=		
7) $2^0 =$	=		
8) $2^{-4} \times 2^2 =$	=		
9) $(\frac{1}{2})^3 =$	=		
(73)			
10) $3^2 \times 3^3 =$			
	0	1-10 90 80 70	60 50 40 30 20 10 0
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Solving Using the Laws of Exponents	Name: Answer Key
lve each problem using the laws of exponents.	Answers
$3^{1} = 3 = 3$	13
	2. 64
$(2^3)^2 = 2^{3 \times 2} = 64$	
	3. <u>36</u>
	44
$(2 \times 3)^2 = 2^2 \times 3^2 = 36$	5. <u>1/9</u>
	1/
) $2^2 \times 2^{-4} = 2^{2-4} = \frac{1}{4}$	6. 79
$2 \times 2 - 2^{-1} - 7_4$	71
	8. <u>1/4</u>
$(\frac{1}{3})^2 = \frac{1}{3^2} = \frac{1}{9}$	927
	10
$3^{-2} = \frac{1}{3^2} = \frac{1}{9}$	
$2^{0} = 1 = 1$	
$2^{-4} \times 2^2 = 2^{-4+2} = \frac{1}{4}$	
$(1/3)^3 = 1/3^3 = 1/3^3 = 1/27$	
<u> </u>	
$3^{2} \times 3^{3} = 3^{2+3} = 243$	