Name_____

Block_____

Algebra Risk!

Question:	Answer:	How much you have	How much you risk
1. Write in scientific notation:		100	
2. Simplify, using only positive exponents:			
3. Simplify, using only positive exponents:			
4. Write in standard notation:			
5. Simplify:			
6. Write an expression to model:			
7. Write in standard notation:			
8. Simplify, using only positive exponents:			
9. Write in scientific notation:			
10. Write an expression to model:			
	Your total points:		

Algebra Risk!

KEY

Question:	Answer:	How much you have	How much you risk
1. Write in scientific notation: 14,050,000	$1.405 \cdot 10^{7}$	100	
2. Simplify, using only positive exponents: $\frac{(-3ab^2)^2}{3a^2b}$	$3b^3$		
3. Simplify, using only positive exponents: $(2a^2b^2)\cdot(a^{-2}b^{-3})$	$\frac{2}{b}$ or $2\cdot\frac{1}{b}$		
4. Write in standard notation: $9.2 \cdot 10^{-6}$	0.0000092		
5. Simplify: $(43x^2y^3z^2)^0\cdot(2xyz)^1$	$2xyz$		
6. Write an expression to model: I invest $500 in a savings account earning 4% annual interest. The account balance after x years is	$500(1+.04)^x$ or $500(1.04)^x$		
7. Write in standard notation: $-1.4 \cdot 10^{4}$	-14000		
8. Simplify, using only positive exponents: $\frac{(2xy^2)^3}{(-2x^2y)^2}$	$\frac{2y^4}{x}$ or $2y^4\frac{1}{x}$		
9. Write in scientific notation: -12.366	$-1.2366 \cdot 10^{1}$		
10. Write an expression to model: A ball dropped from 6' always rebounds to 88% of its height. The ball's height after x bounces is	$6(.88)^x$ or $6(1-.12)^x$		
	Your total points:		