

Warm-Up

October 13, 2015

1. What are the two parts of a power?

2^3
 $2 \leftarrow$ Base
 $3 \leftarrow$ exponent

2. Write 5^6 as a repeated multiplication and evaluate.

$$5 \times 5 \times 5 \times 5 \times 5 \times 5 = 15625 \quad \text{Standard form/}$$

Power	Base	Exponent	Repeated Multiplication	Evaluate
5^4	5	4	$5 \times 5 \times 5 \times 5$	625
6^3	6	3	$6 \times 6 \times 6$	216



What is the base in each of the following:

A. 8^7

B. $(-10)^5$

C. $(\frac{1}{4})^3$

Base

8

-10

$\frac{1}{4}$



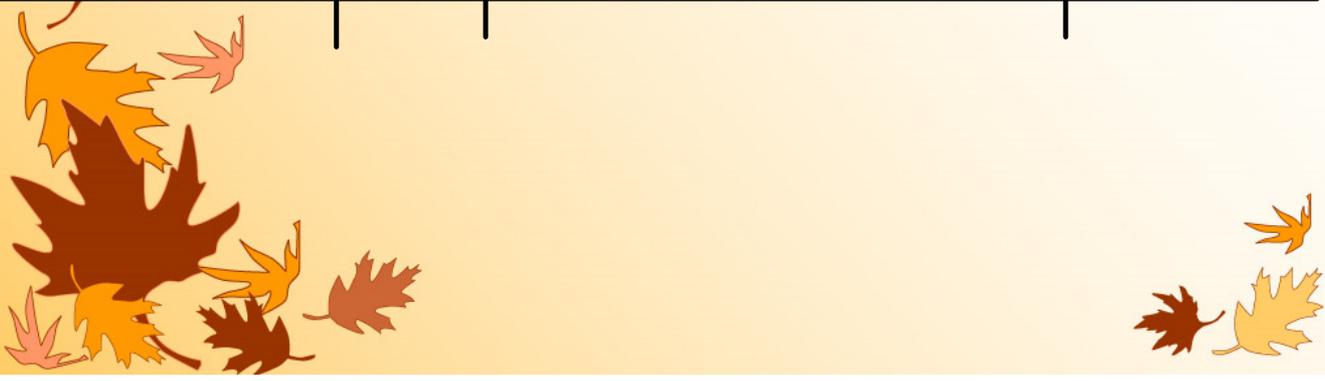
What if a power has a negative sign?

	A. $(-3)^4$	B. -3^4	C. $-(-3)^4$
Base	-3	3	-3
Repeated multiplication	$-3 \times -3 \times -3 \times -3$	$-(3 \times 3 \times 3 \times 3)$	$-(-3 \times -3 \times -3 \times -3)$
Evaluate	81	-81	-81





	Base	Repeated multiplication	Evaluate
A. 4^5	4	$4 \times 4 \times 4 \times 4 \times 4$	1024
B. -2^5	2	$-(2 \times 2 \times 2 \times 2 \times 2)$	-32
C. $(-2)^5$	-2	$-2 \times -2 \times -2 \times -2 \times -2$	-32
D. $(-2)^4$	-2	$-2 \times -2 \times -2 \times -2$	16



Evaluate The following:
Standard Form.

A. 10^5

100 000

B. $(-5)^3$ ← odd

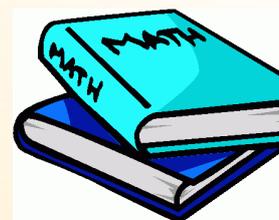
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C. $-(2.3)^6$

- 148.04

D. $(-3)^2$ ← even

9



Predict whether the final answer will be positive or negative:

a. $(-2)^3$

$(-)(-)(-)$

negative

B. $-(2)^4$

$(-)(+)$

negative

C. $-(-3)^4$

$(-)(+)$

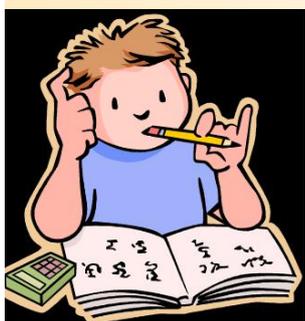
negative

D. -3^3

-3^4

negative





Homework questions

Test Signed

Page 55-56

7, 8, 9, 12, 13, 14

chart

Question answer

	Question	Base
7.	Power	2
a)	2^7	
b)		
c)		

