

# 8.5 Scientific Notation

March 06, 2007

## Scientific Notation:

is in the form

$$C \times 10^n$$

where

$$C \Rightarrow 1 \leq C < 10$$

$n \Rightarrow$  is an Integer

$$\{\dots, -3, -2, -1, 0, 1, 2, 3, \dots\}$$

$C$ , must be greater than or equal to 1  
But less than 10.

S.N. to Value (#)

$$2.83 \times 10^1 = 2.83 \times 10 = \underline{\underline{28.3}}$$

$$4.9 \times 10^5 = 4.9 \times 100,000 = \underline{\underline{490,000}}$$

$$8. \times 10^{-1} = \frac{8}{1} \times \frac{1}{10} = \frac{8}{10} = \underline{\underline{.8}}$$

$$1.23 \times 10^{-3} = \frac{1.23}{1} \times \frac{1}{1000} = \frac{1.23}{1000} =$$

.00123

tenths  
hundredths  
thousandths

Positive Exponents Move the  
decimal to the Right

Negative Exponents Move the  
decimal to the Left.

$$1.2 \times 10^3 = \underline{\underline{1200}}$$

$$4.75 \times 10^0 = 4.75 \otimes \underline{1} = \underline{\underline{4.75}}$$

$$5.6 \times 10^{-1} = \underline{\underline{.56}}$$

O.T.L.

~~yesterday~~

~~① Pg 469: Checkpoint at  
the Bottom 1-6 all~~

② Pg 472: 20-31 all

# Square Roots + Squaring

$1^2 = 1$	$8^2 = 64$	* $17^2 = 289$
$2^2 = 4$	$9^2 = 81$	* $18^2 = 324$
$3^2 = 9$	$10^2 = 100$	* $19^2 = 361$
$4^2 = 16$	$11^2 = 121$	$20^2 = 400$
$5^2 = 25$	$12^2 = 144$	20 problems
$6^2 = 36$	$13^2 = 169$	45 seconds
$7^2 = 49$	$14^2 = 196$	once a week
* $16^2 = 256$	$15^2 = 225$	<b>220pts</b>

$\sqrt{1} = 1$	$\sqrt{81} = 9$	$\sqrt{256} = 16$
$\sqrt{4} = 2$	$\sqrt{100} = 10$	$\sqrt{289} = 17$
$\sqrt{9} = 3$	$\sqrt{121} = 11$	$\sqrt{324} = 18$
$\sqrt{16} = 4$	$\sqrt{144} = 12$	$\sqrt{361} = 19$
$\sqrt{25} = 5$	$\sqrt{169} = 13$	$\sqrt{400} = 20$
$\sqrt{36} = 6$	$\sqrt{196} = 14$	
$\sqrt{49} = 7$	$\sqrt{225} = 15$	
$\sqrt{64} = 8$		

20 problems  
45 seconds  
once a week  
**220 pts**

$1^2 = 1$      $8^2 = 64$      $17^2 = 289$   
 $2^2 = 4$      $9^2 = 81$      $18^2 = 324$   
 $3^2 = 9$      $10^2 = 100$      $19^2 = 361$   
 $4^2 = 16$      $11^2 = 121$      $20^2 = 400$   
 $5^2 = 25$      $12^2 = 144$      $20 \text{ problems}$   
 $6^2 = 36$      $13^2 = 169$      $45 \text{ seconds}$   
 $7^2 = 49$      $14^2 = 196$      $\text{once a week}$   
 $15^2 = 225$   
 $16^2 = 256$

$\rightarrow$   
 (140pts)

Questions  
 Black  
 Answers  
 Blue

$\sqrt{1} = 1$      $\sqrt{81} = 9$      $\sqrt{256} = 16$   
 $\sqrt{4} = 2$      $\sqrt{100} = 10$      $\sqrt{289} = 17$   
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 $\sqrt{36} = 6$      $\sqrt{196} = 14$   
 $\sqrt{49} = 7$      $\sqrt{225} = 15$   
 $\sqrt{64} = 8$

$\rightarrow$   
 (140pts)

Front

Back

$5^2$   
 Question

25  
 Answer

40 cards  
 questions +  
 Answers

$5^2$   
 Question

$\sqrt{25}$   
 Question

20  $\rightarrow$  All  
 questions  
 No Answers

O.T.L.

① Make Flash Cards

Note: from this moment on, I can  
 at ANYTIME Give a P.S. + Red Test.