

8.5 Scientific Notation

March 06, 2007

Scientific Notation:

is in the Form

where $C \times 10^n$

$C \Rightarrow 1 \leq C < 10$

$n \Rightarrow$ 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 (#)

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

$$4.9 \times 10^5 = 4.9 \otimes 100,000 = 490,000$$

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

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

.00123
tenths
hundredths
thousandths

Positive Exponents Move the
decimal to the Right

Negative Exponents Move the
decimal to the Left.

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

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

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

O.T.L.

~~yesterday~~

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

② pg 472: 20-31 all

Square Roots + Squaring

$$1^2 = 1$$

$$2^2 = 4$$

$$3^2 = 9$$

$$4^2 = 16$$

$$5^2 = 25$$

$$6^2 = 36$$

$$7^2 = 49$$

$$8^2 = 64$$

$$9^2 = 81$$

$$10^2 = 100$$

$$11^2 = 121$$

$$12^2 = 144$$

$$13^2 = 169$$

$$14^2 = 196$$

$$15^2 = 225$$

$$* 16^2 = 256$$

$$* 17^2 = 289$$

$$* 18^2 = 324$$

$$* 19^2 = 361$$

$$20^2 = 400$$

20 problems

45 seconds

once a week

220pts

$$\sqrt{1} = 1$$

$$\sqrt{4} = 2$$

$$\sqrt{9} = 3$$

$$\sqrt{16} = 4$$

$$\sqrt{25} = 5$$

$$\sqrt{36} = 6$$

$$\sqrt{49} = 7$$

$$\sqrt{64} = 8$$

$$\sqrt{81} = 9$$

$$\sqrt{100} = 10$$

$$\sqrt{121} = 11$$

$$\sqrt{144} = 12$$

$$\sqrt{169} = 13$$

$$\sqrt{196} = 14$$

$$\sqrt{225} = 15$$

$$\sqrt{256} = 16$$

$$\sqrt{289} = 17$$

$$\sqrt{324} = 18$$

$$\sqrt{361} = 19$$

$$\sqrt{400} = 20$$

20 problems
45 seconds
once a week
220 pts

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

20 problems
45 seconds
once a week
140pts

Questions
Black
Answers
Blue

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

20 problems
45 seconds
once a week
140pts

Front

$$5^2$$

Question

Back

$$25$$

Answer

40 cards
questions &
Answers

$$5^2$$

Question

$$\sqrt{25}$$

Question

20 → 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.