

$$4.83 \times 10^{-3}$$

0.00483

0.00483

0.000004

$4.0 \times 10^{-6}$

$$\frac{x^{10} y^7 z^3}{x^5 y^{10} z^{-3}} = \frac{x^5 z^6}{y^3}$$

a)  $3.96 R$    b)  $-69.5 R$

c)  $3.209\dots I$    d)  $\sqrt{54} I$

# Scientific Notation

Base has to be between 1 & 10  
1. 9.

exponent

Base

5.890000000000000000000000

$5.89 \times 10^{14}$



36500

$3.65 \times 10^4$

$5.1 \times 10^{-4}$

0005.1

00051



0.045

$4.5 \times 10^{-2}$

$$5.6 \times 10^9$$

$$3 \times 10^9$$

$$8.9 \times 10^0$$

$$\frac{X^{10} Y^9 Z^3}{X^5 Y^{10} Z^{-3}} = \frac{X^5 Z^6}{Y^3}$$

$$\begin{aligned} (2x^4y^{-3})^2 &= 2^2(x^4)^2(y^{-3})^2 = \\ &= 4x^8y^{-6} = \frac{4x^8}{y^6} \end{aligned}$$

$$\sqrt{2x+3x+10} = -5x+20 \quad \#$$

$$2x+3x+5x$$

$$5x+5x$$

$$10x$$

$$\div 10$$

$$\frac{\quad}{x}$$

$$-20 -10$$

$$-30$$

$$\div 10$$

$$-3$$

Scientific Notation

$5 \times 10^7$

$6 \times 10^{-4}$

50000000.

.0006

50,000,000

Standard Notation

0.0006

Scientific Notation

$N \times 10^e$

where

$1 \leq N < 10$

- ~~a.  $11.5 \times 10^6$~~
- ✓ b.  $3.42 \times 10^{11}$
- ~~c.  $0.51 \times 10^{-3}$~~
- ~~d.  $327.6 \times 10^2$~~

e.g.

$1.0 \times 10^{25}$