

**Exercise 1**

Completed

**Exercise 2**

Prefix	Name	Associated Power of 10
n	nano	$10^{-9}$
u	micro	$10^{-6}$
m	milli	$10^{-3}$
c	centi	$10^{-2}$
d	deci	$10^{-1}$
base	base	$10^0$
da	deca	$10^1$
h	hecto	$10^2$
k	kilo	$10^3$
M	meg	$10^6$
G	giga	$10^9$
T	tera	$10^{12}$

**Exercise 3**

Statue of Liberty = 305 ft

Earth to Moon = 384.4 million miles

Earth to Moon (in feet) = 2029632000000 ft

Earth to Moon (in feet)/Statue of Liberty (in feet) = 6654531147.54 Statues of Liberty

**Exercise 4**

5.432e14 u sec (micro seconds)

=  $5.432 \times 10^{14}$ 

= 543,200,000 seconds

543,200,000 seconds to years = ~17.22 years

**Exercise 5**

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$$\frac{f \cdot (a - b \cdot c^{(d - ex)^2})}{f} = g \cdot f$$

$-a$ 
 $-a$

$-b$ 
 $-b$

$$\rightarrow (d - ex)^2 = \frac{gf - a}{-b}$$

$$\rightarrow (d - ex)^2 \ln(c) = \ln\left(\frac{gf - a}{-b}\right)$$

$$\rightarrow (d - ex) = \pm \sqrt{\frac{\ln\left(\frac{gf - a}{-b}\right)}{\ln(c)}}$$

$$\frac{dx}{f} = d \pm \sqrt{\frac{\ln\left(\frac{gf - a}{-b}\right)}{\ln(c)}} \cdot \frac{1}{e}$$

$$x = \frac{d \pm \sqrt{\frac{\ln\left(\frac{gf - a}{-b}\right)}{\ln(c)}}}{e}$$

## Exercise 6

Completed