Math 1000 - Final Exam Acceptable Notes Name_____

Length	Weight
1 ft = 12 in.	1 lb = 16 oz
1 yd = 3 ft = 36 in.	1 ton = 2000 lb
1 rod (rd) = $16\frac{1}{2}$ ft	
1 mi = 5280 ft = 1760 yd	

Liquid Capacity	Area
1 tablespoon (T) = 3 teaspoons (t)	1 sq ft = 144 sq in.
1 fluid ounce (fl oz) = 2 T	1 sq yd = 9 sq ft = 1296 sq in.
1 measuring cup = 8 fl oz	1 sq rod = 30.25 sq yd
1 pint (pt) = 2 cups = 16 fl oz	1 acre = 160 sq rod = 4840 sq yd
1 qt = 2 pt	1 acre = 43,560 sq ft
1 gal = 4 qt	1 sq mi = 640 acres

Volume	Time
1 cu ft = 1728 cu in.	1 min = 60 sec
1 gal = 231 cu in.	1 hr or 1 h = 60 min = 3600 sec
1 bu = 2150.42 cu in.	1 day = 24 hr
1 pt = 28.875 cu in.	
1 cu yd = 27 cu ft = 46,656 cu in.	
1 cu ft ≈ 7.48 gal	
1 fl oz = 1.805 cu in.	

$a_n = a_1 + d(n-1)$ $\quad S_n = \frac{n}{2}(a_1 + a_n)$ $\quad a_n = a_1 r^{n-1}$ $\quad S_n = \frac{a_1(1-r^n)}{1-r}$

Simple Interest: I = Prt

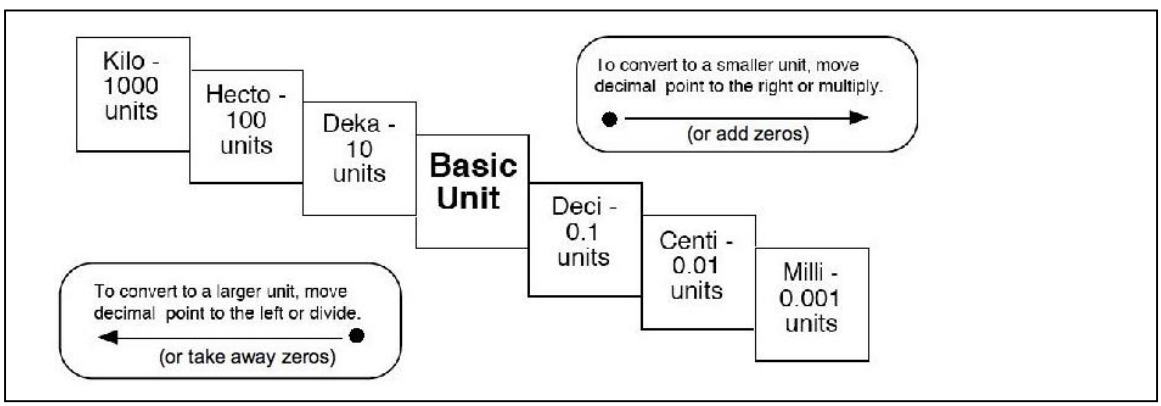
Calculating the amount for compound interest paid n times per year: $A = P(1+\frac{r}{n})^{nt}$

Calculating the amount for compounding continuously: $A = Pe^{rt}$

Loan Payment Formula (for homes, cars, etc.) You can also use the APPS on your Graphing Calculator.

$$PMT = \frac{P(\frac{r}{n})}{[1-\left(1+\frac{r}{n}\right)^{-nt}]}$$

Metric–Metric	Metric–English
Length	
1 cm = 10 mm (10 millimeters)	1 in. = 2.54 cm
1 m = 100 cm = 1000 mm	1 ft = 30.48 cm
1 km = 1000 m	1 yd = 0.9144 m
	1 mi ≈ 1.6093 km
Weight/Mass	
1 mg = 1000 μg (1000 micrograms)	1 oz = 28.35 g
1 g = 1000 mg	1 lb = 0.4536 kg
1 kg = 1000 g	1 T = 907.2 kg
1 metric ton = 1000 kg	
Area	
1 ha = 10,000 sq m (m^2)	1 sq in. ($in.^2$) ≈ 6.452 sq cm (cm^2)
	1 sq ft (ft^2) ≈ 0.0929 sq m (m^2)
	1 sq yd (yd^2) ≈ 0.836 sq m
Volume	
1 mL = 1000 μL	1 cu in. ($in.^3$) ≈ 16.387 cu cm (cm^3)
1 cu cm (cm^3) = 1 mL (1 milliliter)	1 cu yd (yd^3) ≈ 0.765 cu m (m^3)
1 liter (L) = 1000 cu cm	1 fluid ounce ≈ 29.574 mL
	1 qt ≈ 0.946 liter
	1 gal ≈ 3.785 liters



$A = A_0 2^{\frac{t}{d}}$ $\quad$ $A_0 e^{kt}$ $\quad$ $A = A_0\left(\frac{1}{2}\right)^{t/h}$

Volume of Cylinder: $V = \pi r^2 h$

Volume of Cone: $V = \frac{1}{3}\pi r^2 h$

Volume of Pyramid: $V = \frac{1}{3}Bh$

Area of Trapezoid: $A = (\frac{b_1+b_2}{2})h$