TMTH 010
TEST 1 FORMULA SHEET

Whole Numbers $\text{Mean} = \frac{\text{Sum of Values}}{\text{Number of Values}}$

Fractions $\text{Fraction} = \frac{\text{Part}}{\text{Base}}$

Decimals $\text{Rate} = \frac{\text{Part}}{\text{Base}}$

Percent Interest = Principal × Rate × Time

The Metric System

Value	10^3	10^2	10^1	Base units	10^{-1}	10^{-2}	10^{-3}
Name	*kilo*	*hecto*	*deca*	*metre, gram, litre*	*deci*	*centi*	*milli*
Symbol	k	h	da	m, g, l	d	c	m

Conversion Factors

Length

1 centimeter (cm) = 0.3937 inch (in)
1foot (ft) = 12 inch (in) = 0.3048 meter (m)
1 inch (in) = 2.54 centimeters (cm)
1 kilometer (km) = 0.6214 statute mile (mi)
1 statute mile (mi) = 5280 feet (ft) = 1.609 kilometers (km)
1 yard (yd) = 3 feet (ft) = 0.9144 meter (m)
1 meter (m) = 39.37 inches (in) = 3.281 feet (ft)

Area

1 square foot (ft^2) = 144 square inches (in^2) = 0.09290 square meters (m^2)
1 square meter (m^2) = 10.76 square feet (ft^2) = 1550 square inches (in^2)
1 square inch (in^2) = 6.452 square centimeters (cm^2)
1 acre = 43560 square feet (ft^2) = 4047 square meters (m^2)
1 square centimeter (cm^2) = 0.1550 square inches (in^2)
1 square mile (mi^2) = 27 878 400 square feet (ft^2) = 640 acre

Volume

1 cubic yard (yd^3) = 27 cubic feet (ft^3) = 0.7646 cubic meter (m^3)
1 cubic meter (m^3) = 35.3 cubic feet (ft^3)
1 cubic inch (in^3) = 16.39 cubic centimeters (cm^3)
1 cubic foot (ft^3) = 1728 cubic inches (in^3) = 28320 cubic centimeters (cm^3)

Mass
1 pound = 16 ounces = 454 grams
1 ton = 2000 pounds
1 metric tonne = 1000 kg = 2200 pounds
1 kg = 2.2 pounds

Temperature

$$°\mathrm{F} = \frac{9}{5}°\mathrm{C} + 32$$

$$°\mathrm{C} = \frac{5}{9}(°\mathrm{F} - 32)$$

$$K = °\mathrm{C} + 273$$

$$°\mathrm{C} = K - 273$$