

TMTH 110
TEST 2 FORMULA SHEET

The Metric System

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

CONVERSION BETWEEN METRIC UNITS AND BRITISH UNITS

Conversion Factors

Length

- 1 centimeter (cm) = 0.3937 inch (in)
- 1 foot (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 (ft²) = 144 square inches (in²) = 0.09290 square meters (m²)
- 1 square meter (m²) = 10.76 square feet (ft²) = 1550 square inches (in²)
- 1 square inch (in²) = 6.452 square centimeters (cm²)
- 1 acre = 43560 square feet (ft²) = 4047 square meters (m²)
- 1 square centimeter (cm²) = 0.1150 square inches (in²)
- 1 square mile (mi²) = 27 878 400 square feet (ft²) = 640 acre

Volume

- 1 cubic yard (yd³) = 27 cubic feet (ft³) = 0.7646 cubic meter (m³)
- 1 cubic meter (m³) = 35.31 cubic feet (ft³)
- 1 cubic inch (in³) = 16.39 cubic centimeters (cm³)
- 1 cubic foot (ft³) = 1728 cubic inches (in³) = 28 320 cubic centimeters (cm³)

Mass

1 pound = 16 ounces = 454 grams

1 ton = 2000 pounds

1 metric tonne = 1000 kg = 2200 pounds

1 kg = 2.2 pounds

$$\text{Slope} = \frac{\text{rise(or fall)}}{\text{run}}$$