



ILEARN Grade 4 Mathematics Reference Sheet

Length

Customary

1 yard (yd) = 3 feet (ft)
1 foot (ft) = 12 inches (in)

Metric

1 kilometer (km) = 1,000 meters (m)
1 meter (m) = 100 centimeters (cm)

Volume and Capacity

Customary

1 gallon (gal) = 4 quarts (qt)
1 quart (qt) = 2 pints (pt)
1 pint (pt) = 2 cups (c)
1 cup (c) = 8 ounces (oz)

Metric

1 liter (L) = 1,000 milliliters (mL)

Weight and Mass

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

Time

1 year = 12 months
1 year = 52 weeks
1 week = 7 days

1 day = 24 hours
1 hour = 60 minutes
1 minute = 60 seconds



ILEARN Grade 5 Mathematics Reference Sheet

Length

Customary

1 yard (yd) = 3 feet (ft)
1 foot (ft) = 12 inches (in)
1 mile (mi) = 5,280 feet (ft)

Metric

1 kilometer (km) = 1,000 meters (m)
1 meter (m) = 100 centimeters (cm)
1 meter (m) = 1,000 millimeters (mm)

Volume and Capacity

Customary

1 gallon (gal) = 4 quarts (qt)
1 quart (qt) = 2 pints (pt)
1 pint (pt) = 2 cups (c)
1 cup (c) = 8 ounces (oz)

Metric

1 liter (L) = 1,000 milliliters (mL)

Weight and Mass

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)
1 gram (g) = 1,000 milligrams (mg)

Time

1 year = 12 months
1 year = 52 weeks
1 week = 7 days
1 day = 24 hours
1 hour = 60 minutes
1 minute = 60 seconds

Area

Area of a triangle = $\frac{1}{2}bh$

Area of a parallelogram = bh

Area of a trapezoid = $\frac{1}{2}h(b_1 + b_2)$



ILEARN Grade 6 Mathematics Reference Sheet

Length

1 kilometer (km) \approx 0.62 mile (mi)

1 meter (m) \approx 3.28 feet (ft)

1 meter (m) \approx 1.09 yards (yd)

1 meter (m) \approx 39.37 inches (in)

1 centimeter (cm) \approx 0.39 inch (in)

1 mile (mi) \approx 1.61 kilometers (km)

1 foot (ft) \approx 0.30 meter (m)

1 yard (yd) \approx 0.91 meter (m)

1 inch (in) \approx 2.54 centimeters (cm)

Volume

1 liter (L) \approx 1.06 quarts

1 liter (L) \approx 0.26 gallon

1 gallon (gal) \approx 3.79 liters (L)

1 quart (qt) \approx 0.95 liter (L)

1 fluid ounce \approx 29.57 milliliters (mL)

Mass

1 kilogram (kg) \approx 2.20 pounds (lb)

1 gram (g) \approx 0.04 ounce (oz)

1 pound (lb) \approx 0.45 kilograms (kg)

1 ounce (oz) \approx 28.35 grams (g)

Area

Area of a triangle = $\frac{1}{2}bh$

Area of a parallelogram = bh

Area of a trapezoid = $\frac{1}{2}h(b_1 + b_2)$



ILEARN Grade 7 Mathematics Reference Sheet

Volume

Volume of a cylinder = $\pi r^2 h$

Area

Area of a circle = πr^2

Circumference

Circumference of a circle = πd or $2\pi r$



ILEARN Grade 8 Mathematics Reference Sheet

Volume

$$\text{Volume of a cone} = \frac{1}{3}\pi r^2 h$$

$$\text{Volume of a sphere} = \frac{4}{3}\pi r^3$$

$$\text{Volume of a pyramid} = \frac{1}{3}Bh$$

Surface Area

$$\text{Surface area of a sphere} = 4\pi r^2$$

Pythagorean Theorem

$$\text{Pythagorean Theorem: } a^2 + b^2 = c^2$$