

Grade 8 FAST Mathematics Reference Sheet

Conversions within a System of Measure

Customary Conversions

1 foot = 12 inches
 1 yard = 3 feet
 1 mile = 5,280 feet
 1 mile = 1,760 yards

 1 cup = 8 fluid ounces
 1 pint = 2 cups
 1 quart = 2 pints
 1 gallon = 4 quarts

1 pound = 16 ounces
 1 ton = 2,000 pounds

Metric Conversions

1 meter = 100 centimeters
 1 meter = 1000 millimeters
 1 kilometer = 1000 meters

 1 liter = 1000 milliliters

 1 gram = 1000 milligrams
 1 kilogram = 1000 grams

Time Conversions

1 minute = 60 seconds
 1 hour = 60 minutes
 1 day = 24 hours
 1 week = 7 days
 1 year = 365 days
 1 year = 52 weeks

Conversions between Systems of Measure

Customary to Metric Conversion Approximations

1 inch = 2.54 centimeters
 1 foot = 0.305 meters
 1 mile = 1.61 kilometers

 1 cup = 0.24 liters
 1 gallon = 3.785 liters
 1 ounce = 28.35 grams
 1 pound = 0.454 kilograms

Metric to Customary Conversion Approximations

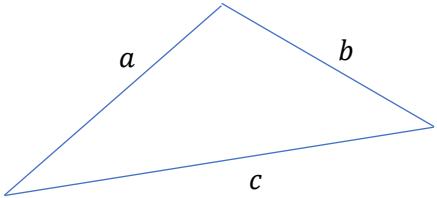
1 centimeter = 0.39 inches
 1 meter = 3.28 feet
 1 kilometer = 0.62 miles

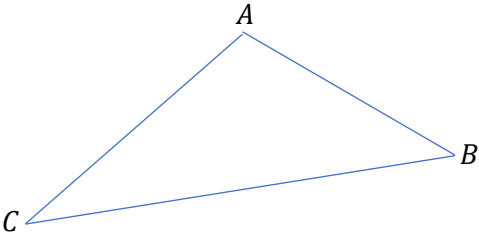
 1 liter = 4.23 cups
 1 liter = 0.264 gallons
 1 gram = 0.0352 ounces
 1 kilogram = 2.204 pounds

Formula

Slope Formula
$m = \frac{y_2 - y_1}{x_2 - x_1}$ where m = slope

Grade 8 FAST Mathematics Reference Sheet**Theorems**

Triangle Inequality Theorem	
	$\begin{aligned}a + b &> c \\a + c &> b \\b + c &> a\end{aligned}$

Triangle Sum Theorem	
	$m\angle A + m\angle B + m\angle C = 180^\circ$