FSA Mathematics Reference Sheets Packet

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December 15, 2014
Grade 4 FSA Mathematics Reference Sheet

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 year = 365 days
1 year = 52 weeks

Formulas

\[ A = lw \]

\[ P = 2l + 2w \]
Grade 5 FSA Mathematics Reference Sheet

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 year = 365 days
1 year = 52 weeks
Grade 6 FSA Mathematics Reference Sheet

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 year = 365 days
1 year = 52 weeks

Formulas
\[ A = bh \]
\[ A = \frac{1}{2} h(b_1 + b_2) \]
\[ A = lw \]
\[ V = Bh \]
\[ A = \frac{1}{2} bh \]
\[ V = lwh \]
Grade 7 FSA Mathematics Reference Sheet

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 year = 365 days
1 year = 52 weeks

Formulas

\[ A = bh \]
\[ A = lw \]
\[ A = \frac{1}{2} bh \]
\[ A = \frac{1}{2} h(b_1 + b_2) \]
\[ V = Bh \]
\[ V = \frac{1}{3} Bh \]
\[ SA = Ph + 2B \]
\[ SA = \frac{1}{2} P \ell + B \]
Grade 8 FSA Mathematics Reference Sheet

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 year = 365 days
1 year = 52 weeks
Algebra 1 EOC FSA Mathematics Reference Sheet

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 year = 365 days
1 year = 52 weeks
Geometry EOC FSA Mathematics Reference Sheet

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 year = 365 days
1 year = 52 weeks
Geometry EOC FSA Mathematics Reference Sheet

Formulas

\[ \sin A^\circ = \frac{\text{opposite}}{\text{hypotenuse}} \]

\[ \cos A^\circ = \frac{\text{adjacent}}{\text{hypotenuse}} \]

\[ \tan A^\circ = \frac{\text{opposite}}{\text{adjacent}} \]

\[ V = Bh \]

\[ V = \frac{1}{3} Bh \]

\[ V = \frac{4}{3} \pi r^3 \]

\[ y = mx + b, \text{ where } m = \text{slope and } b = \text{y-intercept} \]

\[ y - y_1 = m(x - x_1), \text{ where } m = \text{slope and } (x_1, y_1) \text{ is a point on the line} \]
Algebra 2 EOC FSA Mathematics Reference Sheet

**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 year = 365 days  
1 year = 52 weeks
Algebra 2 EOC FSA Mathematics Reference Sheet

Formulas

\[ x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}, \text{ where } a, b, \text{ and } c \text{ are coefficients in an equation of the form } ax^2 + bx^2 + c = 0 \]

\[ \log_b a = \frac{\log a}{\log b} \]

\[ \sin A^\circ = \frac{\text{opposite}}{\text{hypotenuse}} \]

\[ \cos A^\circ = \frac{\text{adjacent}}{\text{hypotenuse}} \]

\[ \tan A^\circ = \frac{\text{opposite}}{\text{adjacent}} \]

\[ P(B|A) = \frac{P(A \text{ and } B)}{P(A)} \]

\[ P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B) \]

\[ z = \frac{(x - \mu)}{\sigma}, \text{ where } \mu = \text{ mean and } \sigma = \text{ standard deviation} \]
Table of Standard Normal Probabilities for Negative $z$-scores

Table of Standard Normal Probabilities for Positive $z$-scores

$$z = \frac{(X - \mu)}{\sigma}, \text{ where } \mu = \text{mean and } \sigma = \text{standard deviation}$$