



# **FSA Mathematics Reference Sheets Packet**

- Grade 4 FSA Mathematics Reference Sheet
- Grade 5 FSA Mathematics Reference Sheet
- Grade 6 FSA Mathematics Reference Sheet
- Grade 7 FSA Mathematics Reference Sheet
- Grade 8 FSA Mathematics Reference Sheet
- Algebra 1 EOC FSA Mathematics Reference Sheet
- Geometry EOC FSA Mathematics Reference Sheet (2 pages)

**2019-20**

## 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**

$$A = bh$$

$$A = lw$$

$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}h(b_1 + b_2)$$

$$V = Bh$$

$$V = lwh$$

**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**

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

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

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

$$V = Bh$$

$$V = \frac{1}{3} Bh$$

$$V = \frac{4}{3} \pi r^3$$

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

$$y - y_1 = m(x - x_1), \text{ where } m = \text{slope and } (x_1, y_1) \text{ is a point on the line}$$