

Grades 6-8 FCAT Mathematics Reference Sheet



Triangle

Area

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



Rectangle

Area

$$A = lw$$



Trapezoid

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



$$\text{Parallelogram } A = bh$$



Circle

$$A = \pi r^2$$

KEY

b = base	d = diameter
h = height	r = radius
l = length	A = area
w = width	C = circumference
S.A. = Surface area	V = volume

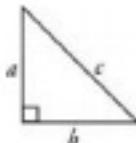
Use 3.14 or 22/7 for

Circumference

$$C = \pi d = 2\pi r$$

In a polygon, the sum of the measures of the interior angles is equal to $180(n - 2)$, where n represents the number of sides.

Pythagorean theorem: $c^2 = a^2 + b^2$



Right Circular Cylinder

Volume

$$V = \pi r^2 h$$

Total Surface Area

$$S.A. = 2\pi rh + 2\pi r^2$$



Rectangular Solid

Volume

$$V = lwh$$

$$S.A. = 2(lw) + 2(hw) + 2(lh)$$

Conversions

1 yard = 3 feet = 36 inches

1 cup = 8 fluid ounces

1 mile = 1,760 yards = 5,280 feet

1 pint = 2 cups

1 acre = 43,560 square feet

1 quart = 2 pints

1 hour = 60 minutes

1 gallon = 4 quarts

1 minute = 60 seconds

1 liter = 1000 milliliters = 1000 cubic centimeters

1 pound = 16 ounces

1 meter = 100 centimeters = 1000 millimeters

1 ton = 2,000 pounds

1 kilometer = 1000 meters

1 gram = 1000 milligrams

1 kilogram = 1000 grams

Metric numbers with four digits are represented without a comma (e.g., 9960 kilometers). For metric numbers greater than four digits, a space is used instead of a comma (e.g., 12 500 liters).