

Garden Math: Handy Formulas for the Backyard

Outdoor chores frequently involve mathematical calculations. For those of us who are number-impaired, here are some quick tips.

Keep a few measuring devices handy in the garage. They include: a retractable tape ruler, preferably one that extends 25 feet or more; a small, battery operated calculator; a bathroom scale; a set of measuring spoons; a measuring cup; a small container that measures tablespoons and/or ounces, such as the ones that come with cough syrup; and, a two-gallon plastic bucket. Since some of these will be used to measure garden chemicals, be sure to label each for garden use only.

For those of you with big bags of lawn fertilizer (but small lawn areas), use the bucket and scale to weigh out the amount of lawn fertilizer to correctly apply. To calculate how much you need: Divide the weight of the full fertilizer bag by the bag's listed coverage area (in square feet); multiply that answer by the square footage of your lawn.

Other handy garden formulas:

* To determine the area of your yard, multiply the length by the width (both in feet). The answer will be in square feet.

* To determine the diameter of a circle (such as a tree trunk): circumference divided by 3.14. To measure the circumference of a tree trunk, wrap a fabric tape measure (or a piece of string) once around the trunk, about waist high.

* To determine the area of a circle: 3.14 times the radius squared. When measuring the area beneath a tree, the radius can be calculated by extending the ruler from the trunk to the drip line (the furthest extension of the tree branches).

* Approximately one cubic yard of mulch will cover 100 square feet with three inches of mulch. A more exact formula: Area (in square feet) times depth of mulch or compost you want to apply (in inches) divided by 324 will give you the number of cubic yards to purchase.

* 27 cubic feet equal one cubic yard.

* Three teaspoons equal one tablespoon. Two tablespoons equal one ounce. 16 tablespoons (eight ounces) equal one cup.

* One acre-foot of water represents the need of two average families, in and around the home for one year. An acre-foot covers 1 acre of land 1 foot deep.

1 acre-foot of water = 43,560 cubic feet = 325,900 gallons

1 cubic foot of water = 7.48 Gallons = 62.4 pounds of Water