

# Yes, There Is Math in Gardening!

Here are some typical problems that gardeners might encounter.

1. A new bed for plants is to be built and we need 24 sq. ft. of planting surface. What dimensions (length and width) could we use and how many feet of wood would be needed to surround the bed?
2. Each package of onions contains about 60 plants tied together. We lose about 5 plants from each package due to damage. So far we have planted 11 packages. We plan to plant one more package. How many potential onions will we have by the middle of May?
3. Eighteen students harvested 55 radishes, 22 turnips and 20 carrots. Seven more students harvested 4 onions each. How many would each student take home if they are to get an **equal** number of vegetables?
4. Approximately  $1\frac{3}{4}$  tons of produce was harvested from the garden and shared by 120 students and 4 teachers during the school year. What was the average weight **in pounds** taken home by each person?
5. Some more new beds are being built. Two of them are 8' by 4' and one is 12' by 3'. Nine 8' landscape timbers were donated by a local lumberyard. Do we have enough timbers to build the beds? If so, how much will be left over? If not, how much more do we need to buy?

## Math in the Oak Forest Garden Store

Wouldn't it be fun if we could start a vegetable stand in our cafeteria to sell produce to other students and their parents? The Oak Forest Farmers' Market?

### Red Radishes

1 bunch  
for 89¢

### Sugar Snap Peas

\$4.88 / lb.

### Onions

69 c lb.  
or  
40 c each

6. We planted 200 radish seeds and had a germination rate of 80%. About 10 radishes are in a bunch. How much money could we make if we sold **half** of the radishes that germinated?
  
7. Sugar snap peas are very expensive. This was the amount picked by 3 classes:
  - 1<sup>st</sup> period - 3 pounds
  - 2<sup>nd</sup> period - 3.2 pounds
  - 3<sup>rd</sup> period - 2.8 poundsSomehow 1 pound mysteriously disappeared **after** the peas were weighed. How much money could we make from this sale?
  
8. We harvested 400 good onions this year. 260 were taken home by students and the remaining onions are to be sold. They weigh about  $\frac{1}{2}$  pound each. As you see by the sign, we could sell them two different ways. Which method would bring in more money? How much more?
  
9. We decided to place the large, pretty tomatoes together in containers of 4 and sell each container for \$2.50. The smaller tomatoes were priced at 59 c per pound. How much change would you give a customer who bought 3 containers and 5 pounds of tomatoes and paid with a \$20 bill?