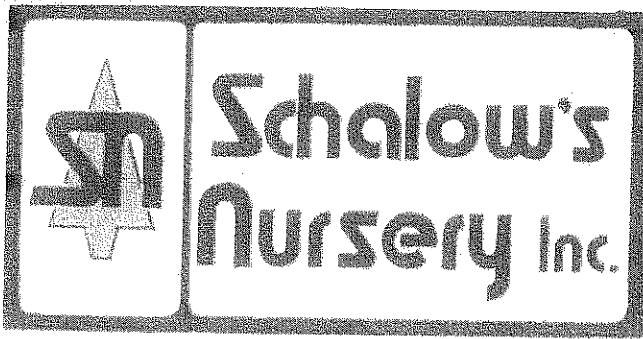
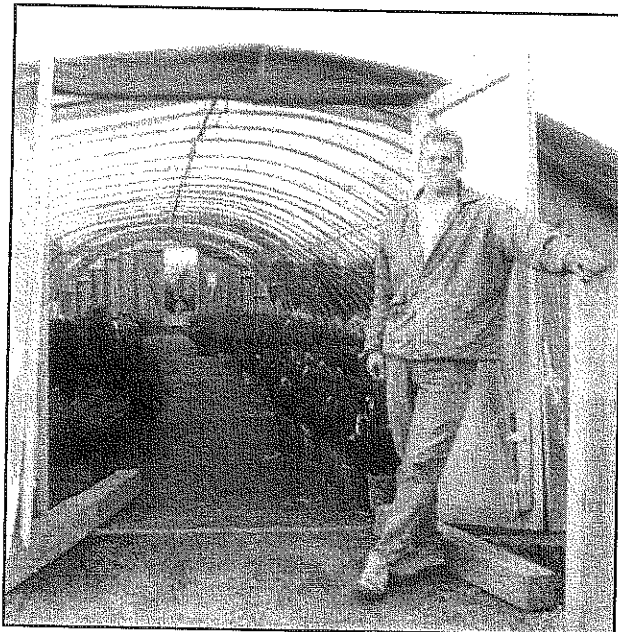


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Mike Kupfer



Mike Kupfer enjoys his job at Schalow's Nursery. He must—he has worked there since he was 14 years old. Mr. Kupfer started working for Schalow's as a weed-puller, then went on to earn a college degree in horticulture and landscape design. Now he supervises all of the landscape crews, and that means lots of math for Mr. Kupfer.

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- A family has asked us to put in a 12 x 16 foot brick patio behind their house.

Brick comes bundled together in a pallet, which we take apart when we get to the job.

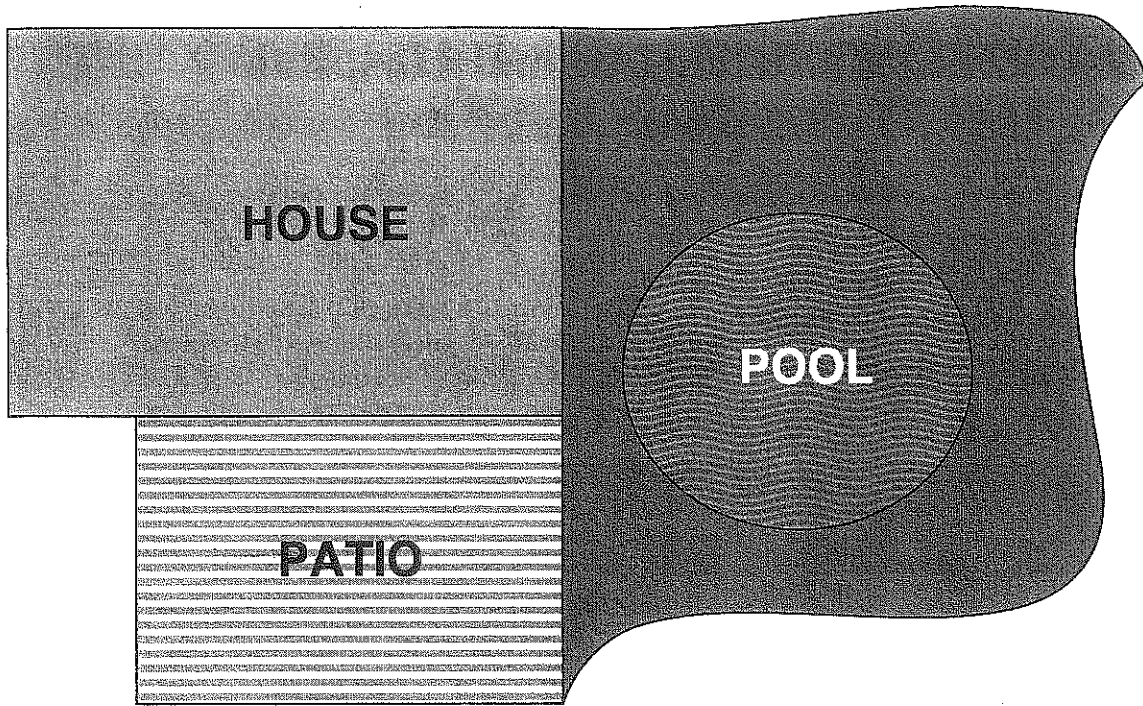
Knowing that there are 89 square feet of brick in a pallet, how many pallets will I need to order?

- When we're laying out a patio, the first thing we have to do is make sure the lines we use to outline it are square to the house. For that, we use the formula discovered by Pythagorus a long time ago which says that in a right angle, the sum of the sides squared will equal the diagonal squared. The formula looks like this: $a^2 + b^2 = c^2$.

Now we have measured out 12 feet from the house, and we have measured 16 feet along the house.

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How can we find out if the patio borders we have drawn are square with the house?

- Roses will be placed every 3 feet around the circumference of the 18' diameter pool. Each will be planted 1 1/2' from the edge. How many roses will we plant? (Hint: $c = \pi \times d$)

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“I always liked math, and that’s good because most of the math we have to do we do in our heads. We especially use math in designing and estimating, where there’s a lot of geometry. When I was in school I often thought, ‘Why am I learning this?’ Now I know why. I use it every day.”



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