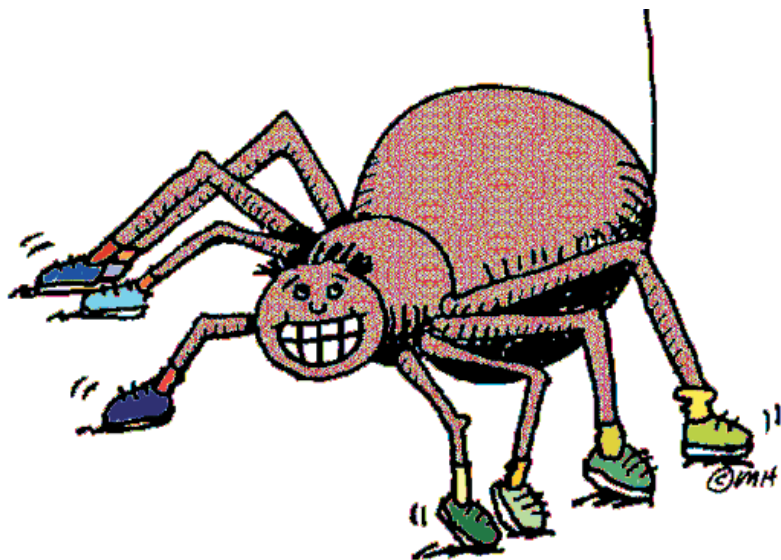


# Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández

September 11-18



A spider has one sock and one shoe for each of its eight legs. In how many different orders can the spider put on its socks and shoes, assuming that, on each leg, the sock must be put on before the shoe? Justify your answer.

This contest is sponsored by the Mathematics Department. Open to all CSUN students. Winner gets \$5 or an equivalent prize. All complete and correct solutions get a certificate. Type and send your solution before September 18th, 9:00PM to [silvia.fernandez@csun.edu](mailto:silvia.fernandez@csun.edu). All steps of the solution must be clearly justified. For rules, winners, solutions, and more information visit: [www.csun.edu/math/probweek](http://www.csun.edu/math/probweek)