



Animal	Acres	# Animals
⊗ Cows	61	488
○ Sheep	41	820
⊘ Horses	27	162
● Goats	13	156
○ Pigs	0	0

common border. Vertex coloring was then used to find the solution. Yong S. Cohen used this technique; the graph and chart are shown above.

Teachers' responses indicated that their students found *The Farmer's Daughter* to be an engaging and thought-provoking problem. It encouraged mathematical dialogue in their classrooms and served as a meaningful way to promote logical, systematic thinking, as well as incorporate basic skills such as multiplication. Based on the range of the respondents' ages, this problem demonstrates that discrete mathematics is accessible to learners of all levels. We encourage all of you to continue solving challenging math problems, and thank everyone for their participation.

We would also like to acknowledge the following

students for submitting solutions. Keep up the mathematical thinking! *Michael Baxter PA, Michelle Barberi NJ, Carly Becker NJ, Sarah Ben-Asher NJ, Nicholas Chen NJ, B.J. Conklyn PA, Jonathan Costa NJ, Natha Davids PA, Jenn Deluca PA, Nicole Dietze PA, Bruce Eaton PA, Danielle Egbert NJ, Marian Fahmy NJ, Jason Fell NJ, Michael Franklin PA, Ryan Giblin PA, Ted Gonzalez PA, Caitlin Hoffman NJ, Jackie Kang NJ, Ryan Kuchinskis PA, David Lertola NJ, Reese Levale PA, Scott Mastroianni NJ, Yaroslav Naumenko PA, Kristina Newcombe PA, Phillip Ngu NJ, Paul Orlando PA, Aba Osseo-Asare PA, Matt Rivers NJ, Ronan Slater PA, Angela Wary PA, Mrs. Watson's 9th-grade honor's geometry students MA, George Vallone NJ, Emily Yama NJ, and Callie Yosh PA.*

## Workshops in Your District

### Discrete Mathematics for K-4, 5-8, and 9-12 Teachers

**EXPLORING DISCRETE MATHEMATICS:** Would you like the teachers in your school or district to become familiar with topics in contemporary mathematics and use them in your classrooms? If your answer is "yes", consider hosting a workshop on discrete mathematics in your district.

**WORKSHOPS IN YOUR DISTRICT!** A trained workshop leader will come to your school or district to lead hands-on interactive workshops on contemporary topics in discrete mathematics. Full-day or half-day workshops are available; workshops deal with a variety of topics in discrete mathematics and are addressed to a variety of grade levels of teachers.

**WHEN?** Workshops will be scheduled on an individual basis at your request. They may be scheduled during the school year or during the summer.

**BY WHOM?** These workshops are presented by experienced workshop leaders who have participated in the Rutgers Leadership Program in Discrete Mathematics and have used the workshop materials in their own classrooms.

**FOR FURTHER INFORMATION, INCLUDING FEES:** Contact Program Coordinator Debby Toti by email at [toti@dimacs.rutgers.edu](mailto:toti@dimacs.rutgers.edu) or by phone at 732/445-4065, or check <http://dimacs.rutgers.edu/lp/workshops/>