COMAP Announces Winners of the
11th Annual Mathematical Contest in Modeling

A national panel of judges, including representatives from The Institute for Operations Research and the Management Sciences (INFORMS) and the Society for Industrial and Applied Mathematics (SIAM), is pleased to announce the seven outstanding winners of the 1995 Mathematical Contest in Modeling. The teams are: Harvey Mudd College, Claremont CA; N.C. School of Science and Math, Durham, NC; and S.E. Missouri State University, Cape Girardeau, MO. INFORMS designated as their outstanding winners: Problem A, Macalester College, St. Paul, MN; and Problem B was another team from Harvey Mudd College. SIAM chose Iowa State University, Ames, IA for Problem A; and University of Alaska-Fairbanks, AK, for Problem B, as their Outstanding winners.

The 1995 MCM had 320 teams representing 199 schools in 9 countries including: Bulgaria, Canada, China, Hong Kong, Ireland, Latvia, Lithuania, United States, and Zimbabwe. The contest lasted four days, from Friday, February 17 to Monday, February 20, in which the teams, up to three undergraduates, were asked to research and find a solution for one of two open-ended modeling problems. Modeling problems offer no "correct" answer; the idea is to arrive at an "optimal" solution based on the model you present. This year, problem A was to assist a small biotechnological company in designing, proving, programming, and testing a mathematical algorithm to locate "in real time" all the intersections of a helix and a plane in general positions in space; problem B was for the new Provost of a college to institute a fair and reasonable faculty compensation system. With the help of a hired team of consultants, she must design the compensation system that reflects specific circumstances and principles. The MCM differs from other mathematics contests in that it is the only international contest in which the teams of students work together to find a solution; other contests either have the students work alone, or have individuals work alone and combine scores for a team total. Solomon Garfunkel, Executive Director of the contest sponsor, the Consortium for Mathematics and Its Applications (COMAP), Inc. described this year's

solution papers as among the most imaginative we've seen. "For example, one team wrote an elaborate computer program to test their list of three-space intersection points, while another developed an algorithm to address 'bruised egos' in a faculty pay scale. It seems that each year the winning solution papers are more challenging to grade and fun to read."

Incorporated in 1980, COMAP, Inc. is a national, non-profit, organization that produces mathematics curriculum materials which demonstrate the real-world contexts of mathematics. COMAP publishes three quarterly publications, and develops curriculum units in print, video, and software that provide educators, K–Undergraduate, with materials that make learning and teaching mathematics challenging and fun.

1995 MCM Statistics

- A total of 51 teams placed either Outstanding or Meritorious (16%); 84 teams placed Honorable Mention (26%); and 185 teams were Successful Participants (58%).
- 306 teams were from four-year colleges, 12 teams were from two year colleges, and 4 teams were from high schools.
- 148 teams had at least one female team member, 36 teams had two female members, and 11 teams were all-female.

Special Notes

- The 1995 Outstanding winners included five teams consisting of all-male members; one team had at least two female members; one team had one female member.
- N.C. School for Science and Math, one of the two high schools that entered this year, has been designated as an Outstanding winner for the third time since 1990. First under Advisor Daniel Teague in 1992 and 1994, and again in 1995 under Dot Doyle.
- Also since 1990, University of Alaska-Fairbanks has been designated as a four-time Outstanding winner. In 1990, 1993, 1995 under Advisor John P. Lampert, and under Prof. R. A. Hollister in 1991.

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