## ONE IS NOT ENOUGH:

Empowering Students to Generate Multiple Strategies to Solve a Problem



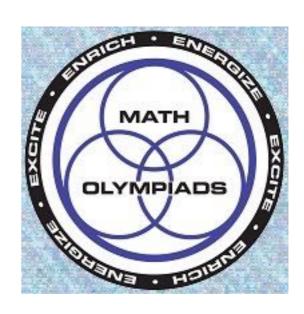
presented by

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### Math Olympiads

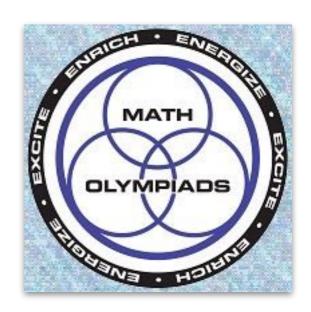
- Developed and organized by MOEMS, a not-for-profit foundation staffed by mathematics educators; based in New York; started in 1979
- International competition with over 170,000 students participating in every state of the United States and over 30 countries. Over 6,000 teams total

Five monthly contests from November through March
Division E for teams in grades 4-6 and Division M for grades 6-8
Contests are downloadable and reproducible from moems.org

Each contest consists of 5 non-routine timed problems

WWW.MOEMS.Org

- ■PICO = Person in Charge of Olympiads, up to 35 students per team
- Suggested preparation: 1 hour/week solving past contest problems (provided)
- After each contest: PICO corrects and submits student scores via website;
   reviews solutions with students



#### **Enrollment fee includes:**

- lots of free PICO support via website, email, phone; 8 online newsletters
- 5 contests with solutions
- end of year student achievement awards: certificates, patches, pins, trophy for highest individual scorer on your team; and team plaque for overall team achievement (top 10%)

#### www.moems.org

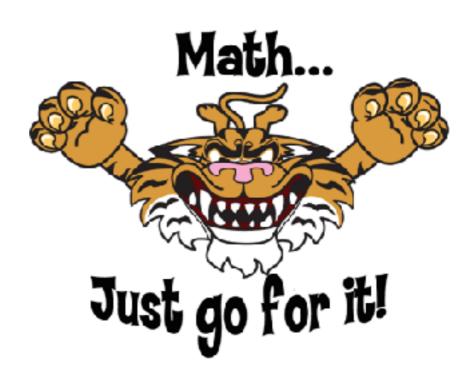
Also available: everything you need to organize a Math Tournament! see website.....

# What I used to do when explaining a math solution



### A NEW APPROACH—

"How many *ways* can we as a class solve this problem?"



### THE 5-STEP REVIEW PROCESS PROMOTES:

- Presentation skills
- Teamwork
- Respectful listening
- Civil discourse
- Minimal teacher participation (guide on the side)
  - Opportunity for *everyone* to remain engaged in exploring multiple strategies to reach the solution to a math problem.



9 Ways

### "THE VALUE OF MATH OLYMPIADS"

Teacher-made video

3.5 minutes

Students, teachers, parents discuss their Math Olympiad experience

All students in the video participated in the 5-step review process for all Math Olympiad Contests