

# MML: OCTOBER 2003 Contest #1

## Round 1: Geometry: Volume/Surface Area

- A)  $132\pi \text{ cm}^2$
- B)  ~~$24 \text{ cm}$~~   $30\pi \text{ cm}^3$
- C)  $2064\pi \text{ cm}^3$

## Round 2: Pythagorean Theorem

- A) 5
- B)  $7\sqrt{6}$
- C)  $2\sqrt{13}$

## Round 3: Linear Equations

- A)  $-5/2$
- B) 40
- C) 39

## Round 4: Fractions and Mixed Numbers

- A) -1
- B)  $3/5$  and  $-10/-8$  (may not be reduced)
- C)  $-111/44$

## Round 5: Inequalities and Absolute Value

- A)  $x < -3$  or  $0 < x < 8$
- B) -1, 2, 3
- C)  $x < -1/3$  or  $x > 1/8$

## Round 6: Evaluations

- A) 2
- B) 81
- C) 16

## Round 7: Team

- A)  ~~$(-80, 38)$~~   $-32$
- B)  $13\sqrt{13}$
- C)  $92\pi$
- D) 3,  $-1/3$
- E)  $x < 1/2$  or  $x > 5$
- F) 4