

**MASSACHUSETTS MATHEMATICS LEAGUE
MARCH 2006 ANSWERS**

Round 1: Algebra 2 – Simultaneous Equations and Determinants

- A) -3 B) (6, 2) (-4, -3) C) (0, 4)

Round 2: Algebra 1 – Rational Exponents and Radicals

- A) (16, 8) B) $2\sqrt{2}$ C) -1, -5

Round 3: Polynomial Functions

- A) 5 B) -10 C) $-4x + 5$

Round 4: Algebra 1 – Anything

- A) 2006 B) \$14.50 C) 2006

Round 5: Plane Geometry - Anything

- A) 20, 84 B) 288 C) $16/3$

Round 6: Algebra 2 – Probability & Binomial Theorem

- A) $1/8$ B) 683 C) 7, 14

Team Round

- A) -4 B) 65 C) (-2, 11, -17)
D) $\sqrt{137}$ E) $52\sqrt{3}$ F) 51