MASSACHUSETTS MATHEMATICS LEAGUE
DECEMBER 2004 ANSWERS

Round 1: A) $\dfrac{-11\sqrt{6}}{24}$ B) $2\sqrt{37}$ C) $52 + \sqrt{15}$

Round 2 A) 90 B) 8 C) 547

Round 3 A) (21,15) and (41, 30) B) $\pm\,20$ C) $\dfrac{k}{5}$

Round 4 A) 8 B) 1, 2 C) $\dfrac{5\sqrt{3}}{6}$

Round 5 A) 625 lbs B) 63.652 C) 3:07:30 pm

Round 6 A) 15 B) 144 C) 22

Team Round A) 48 B) 2004 C) (3–2b)/3 or 1 – (2/3) b

D) 5, $\sqrt[3]{5}$ E) 6:00 p.m. F) 6610