

**MASSACHUSETTS MATHEMATICS LEAGUE
CONTEST 2 - NOVEMBER 2006
ROUND 2 ALGEBRA 1: ANYTHING**

ANSWERS

A) _____

B) _____

C) _____

A) Evaluate: $4^2 + 3 \cdot 7 - 8^{-2} \cdot \frac{2^8}{5 \cdot 9} \div \frac{1}{4 \cdot 3} \cdot 6^2$

B) Determine all values of x for which $\left(\frac{1+x}{2}\right)^2 - 3\left(\frac{1+x}{2}\right) = 18$

C) If he were still alive in the year I was born, Ramanujan on his birthday would have been one year older than I was on my birthday this year. By the end of this year (2006), the sum of our ages would be 178. In what year was I born?