

**MASSACHUSETTS MATHEMATICS LEAGUE
OCTOBER 2005
ROUND 5 INEQUALITIES & ABSOLUTE VALUE**

ANSWERS

A) _____

B) _____

C) _____

A) Find all real x for which $4x^2 + 20x + 25 \leq 0$

B) Find the sum of all solutions to

$$|x(x - 13)| = 30$$

C) Find all real x for which

$$13x^3 > 50x^2 - 44x - 8$$