MASSACHUSETTS MATHEMATICS LEAGUE
CONTEST 1 - OCTOBER 2008
ROUND 5 INEQUALITIES & ABSOLUTE VALUE

ANSWERS

A) _____

B) _____

C) _____

A) If $|2x - 5| \leq 13$, compute the average of the largest positive and smallest negative solutions.

B) Determine the sum of all integers which do **not** satisfy $| 101 - 8x | > 27$

C) Solve for x (over the real numbers): $$\frac{\left(x^2+7x\right)^3\left(x^2+\frac{x}{2}\right)}{x^3-9x^2+27x-27} \leq 0$$