MASSACHUSETTS MATHEMATICS LEAGUE
CONTEST 1 - OCTOBER 2016
ROUND 5 INEQUALITIES & ABSOLUTE VALUE

ANSWERS

A) _____

B) _____

C) _____

A) For what integer value of k, is the inequality $7 \le |x| < k$ satisfied by <u>exactly</u> 6 integers?

B) Compute <u>all</u> values of x for which $|3x+1| \le 7 - x$.

C) Solve for x: $-x^5 + 5x^3 - 4x > 0$