

MASSACHUSETTS MATHEMATICS LEAGUE  
CONTEST 2 - NOVEMBER 2009  
ROUND 2 ALGEBRA 1: ANYTHING

\*\*\*\*\* NO CALCULATORS IN THIS ROUND \*\*\*\*\*

ANSWERS

A) \_\_\_\_\_

B) \_\_\_\_\_

C) \_\_\_\_\_

A) Find 4 consecutive odd integers whose sum is 213 more than the largest of these integers.

B) If  $x + y = 3$  and  $xy = -10$ , find the largest possible value of  $\frac{x}{y}$ .

C) A train travels 150 miles in  $w$  hours. If the rate of the train were increased by  $x$  mph, the train would arrive at its destination in 2 less hours. Find  $x$  in terms of  $w$ .