

MASSACHUSETTS MATHEMATICS LEAGUE
CONTEST 1 - OCTOBER 2006
ROUND 3 ALG 1: LINEAR EQUATIONS

ANSWERS

A) _____

B) _____

C) \$ _____

A) Farmer Euclid MacDonald states: "I have 360 livestock, horses and chickens. The total number of legs, excluding my own, is 1100." How many chickens does farmer MacDonald have?

B) If $(2006, b)$ and $(a, 2006)$ are two points on the line $y = \frac{1}{4}x + 17$, what is the numeric value of $\frac{2006 - a}{2006 - b}$?

C) A shopper went into 10 stores and at each spent half the money she had upon entering the store PLUS an additional 25¢. Her purchases at the last store took all the money she had left. How much money did she have after leaving the third store?