

MASSACHUSETTS MATHEMATICS LEAGUE
CONTEST 1 - OCTOBER 2012
ROUND 6 ALG 1: EVALUATIONS

ANSWERS

A) _____ ft^3

B) \$ _____ . _____

C) _____

A) A box is 8 inches x 9 inches x 15 inches. Compute the volume of this box in ft^3 .

B) Turkey Hill ice cream costs \$1.49/quart and \$5.29/gallon. No other sizes are available.
If a gallon and 3 quarts will serve 15 people equal-sized portions, how much will the minimum ice cream required to serve 100 people the same size portions cost?

Note: 4 quarts = 1 gallon

C) Given: $a \nabla b = \frac{2ab}{a+b} - \sqrt{ab}$ Compute $\frac{1}{2} \nabla \frac{8}{9}$.