

MASSACHUSETTS MATHEMATICS LEAGUE
CONTEST 4 - JANUARY 2013
ROUND 2 ALG 1: FACTORING AND/OR EQUATIONS INVOLVING FACTORING

ANSWERS

A) _____

B) _____

C) _____

A) I am thinking of three integers for which $\sqrt[3]{x-3} = x-3$. What are they?

B) Compute all roots of $3(x^2 - 4) + x^2(x + 2) = 0$.

C) Factor over the integers: $x^2 - 4y^2 + 5x + 2y + 6$