
MATHCOUNTS[®]

2013

■ Chapter Competition ■

Target Round

Problems 5 and 6

Name _____

School _____

**DO NOT BEGIN UNTIL YOU ARE INSTRUCTED
TO DO SO.**

Total Correct	Scorer's Initials

National Sponsors

Raytheon Company * Northrop Grumman Foundation *
U.S. Department of Defense *
National Society of Professional Engineers * CNA Foundation *
ConocoPhillips * Texas Instruments Incorporated *
3M Foundation * Art of Problem Solving * NextThought

Raytheon

2013 MATHCOUNTS
National Competition Sponsor

Founding Sponsors: National Society of Professional Engineers, National Council of Teachers of Mathematics and CNA Foundation

Copyright MATHCOUNTS, Inc. 2012. All rights reserved.

02-C13TAR5

5. _____ Ray's age is half his sister's age, and his age is the square root of one-third their grandfather's age. In 5 years, Ray will be two-thirds as old as his sister will be then. What is the ratio of Ray's sister's age to their grandfather's age right now? Express your answer as a common fraction.

6. _____ Alex added the page numbers of a book together and got a total of 888. Unfortunately, he didn't notice that one of the sheets of the book was missing with an odd page number on the front and an even page number on the back. What was the page number on the final page in the book?

