



April 11, 2015

■ RIT Competition ■
Target Round
Problems 1-4

Name _____

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

This section of the competition consists of 8 problems. You will work on four problems, and answers will be collected, before the next four are distributed. The time limit for each set of four problems is 12 minutes. When told to do so, write your name on this page. When instructed to begin, pick up your pencil and begin working. Record your final answer in the designated space on the problem sheet. All answers must be complete, legible, and simplified to lowest terms. This round assumes the use of a calculator, and calculations may also be done on scratch paper, but no other aids are allowed. If you complete the problems before time is called, use the time remaining to check your answers.

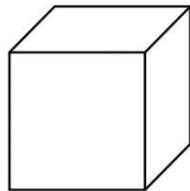
Total Correct	Scorer's Initials

1. Find the positive difference between the mean and the mode of this set of data:

1 1 2 2 2 3 3 4 9

1. _____

2. The volume of a cube is 64 cm^3 . What is the surface area, in square centimeters, of the cube?



2. _____sq. cm

3. One video game was priced \$30 after a 25% price discount. What was the original price in dollars?

3. \$_____

4. Ally has 50 dimes and 20 quarters. What percent of the total value of her money is quarters?

4. _____%



**FOR STUDENTS WHO ARE
DEAF OR HARD OF HEARING**

COMPETITION

April 5, 2014

■ RIT Competition ■
Target Round
Problems 5-8

Name _____

**DO NOT BEGIN UNTIL YOU ARE
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Total Correct	Scorer's Initials

5. Joley wants a bicycle that costs \$87. She has already saved \$15 and she has a job which earns \$4 per hour after taxes. How many hours must she work to earn the additional money needed for the bike? 5. _____ hours
6. What is the sum of the first ten terms of the arithmetic sequence 4, 4.2, 4.4, . . . ? 6. _____
7. Luigi plans to buy 3 T-shirts for \$8.75 and 2 jeans for \$15.98. With 8% sales tax, how many dollars, to the nearest cent, would he spend altogether? 7. \$ _____
8. A train, traveling at an average speed of 50 miles an hour, leaves Rochester at 2 AM. At what time in the morning will the train arrive in Albany, which is 225 miles away? 8. _____ AM