

Online Math League
2009 – 2010 Fifth Grade Contest #1

Student Name _____ Date _____

Rules: You have 30 minutes to complete this test. You must work independently, and calculators and other reference tools are not permitted. Each question has exactly one right answer. Do your best!

1. If 2,417 fans came to the local baseball team's first game, 1,797 fans came to the second game, and 2,184 fans came to the third game, how many fans attended all three games combined?

- A. 5,818 B. 5,828 C. 6,398 D. 6,818 E. 6,828

2. Which of the following fractions is equivalent to one-sixth?

- A. $\frac{6}{7}$ B. $\frac{8}{10}$ C. $\frac{6}{18}$ D. $\frac{6}{36}$ E. $\frac{55}{60}$

3. What number comes next in the following pattern?

900, 225, 450, 112.5, 225, 56.25, _____

- A. 112.5 B. 14.06 C. 115 D. 28.125 E. 72

4. George's football practice lasted for 50 minutes. George's father was supposed to pick George up right after practice but he was twenty minutes late. When George's father finally arrived it was 5:12 p.m. What time was it when George's football practice began?

- A. 3:52 p.m. B. 4:02 p.m. C. 4:12 p.m. D. 4:22 p.m. E. 4:42 p.m.

5. Jill sold her car for \$3,000. John sold his car for \$545. How much more money did Jill get for her car than John got for his?

- A. \$2,155 B. \$2,345 C. \$3,545 D. \$2,455 E. \$1,355

6. Megan is having a party. She invites 10 friends. She wants to serve hot dogs, which cost \$2.39 for a package of ten. She will also need hot dog buns, which cost \$1.09 for a package of eight. If Megan wants everyone to be able to have two hot dogs on a bun, how much will she have to spend? (Hint: Don't forget that Megan will have hot dogs, too.)

- A. \$8.05 B. \$9.35 C. \$6.96 D. \$10.44 E. \$11.53

7. Eight people buy a lottery ticket and win \$10,000. If they want to split the money so that each person gets the same amount, how much will each person get?

- A. \$1,000 B. \$1,250 C. \$1,400 D. \$1,500 E. \$2,000

8. Joe bought a tub of 25 cookies to share with the people in his office. If there are eight people in his office (including Joe), and they each ate two and a half cookies, how many cookies were left?

- A. 2 B. 3 C. 4 D. 5 E. 6

9. If $14 \times n = 32 + 52$, what must be the value of the missing number n ?

- A. 6 B. 7 C. 8 D. 9 E. 10

Average High Temperature in Mudville (°F)						
	January	February	March	April	May	June
Predicted	23.7	29.4	38.6	49.2	56.1	64.3
Actual	23.3	34.1	41.6	53.9	57.3	69.2

The chart above shows the predicted and actual average high temperature each month for the first six months of the year in Mudville.

10. According to the chart, in which month was the difference between the predicted average high temperature and the actual average high temperature the greatest?

- A. February B. March C. April D. May E. June

11. In April, the average high temperature in Mudville was actually higher than predicted. How much higher?

- A. 4.7°F B. 4.9°F C. 3.0°F D. 7.4°F E. 1.2°F

12. What is the product of 6 and 6 divided by the sum of 6 and 6?

- A. 2 B. 3 C. 4 D. 5 E. 6

13. Jason's car gets 25 miles per gallon of gas. He has to drive 32 miles round trip to work each weekday. If gas cost \$2.55 per gallon last week, how much did Jason spend on gas to go to work and back last week?

- A. \$14.84 B. \$15.31 C. \$15.90
D. \$16.08 E. \$16.32

14. Ron has a bag with 42 marbles. One-third of the marbles are blue. Out of these blue marbles, one-seventh of them have no other color. How many of the 42 marbles are blue with no other colors on them?

- A. 1 B. 2 C. 3 D. 7 E. 14

15. Joe buys five candy bars for 45¢ each, a drink for \$2.39, and a pack of markers for \$2.99. If he pays for all of this with a \$10 bill, how much change should he get back? (Ignore sales tax.)

- A. \$1.37 B. \$1.93 C. \$2.08 D. \$2.37 E. \$2.73

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Answer Key, 2009-2010 Fifth Grade Contest #1

1. **C** (The first question on every Online Math League test involves a topic the students should be comfortable with, as we want to begin each test on a positive note. In this case, we've chosen a straightforward addition problem.)

2. **D**

3. **A** (This pattern alternates dividing the previous term by 4 and multiplying the previous term by 2.)

4. **B**

5. **D**

6. **D**

7. **B**

8. **D**

9. **A** (We like algebra-style questions like this because they force students to think differently about topics they are otherwise familiar with.)

10. **E**

11. **A**

12. **B**

13. **E**

14. **B**

15. **D**