New York State Mathematics Association of Two-Year Colleges

Math League Contest Answer Sheet ~ Fall 2019

Directions: You have one hour to take this test. Scrap paper is allowed. The use of calculators is NOT permitted, as well as computers, books, math tables, and notes of any kind. You are not expected to answer all the questions. Yet, do not spend too much time on any one problem. Four points are awarded for each correct answer, one point is deducted for each incorrect answer, and no points are awarded/deducted for blank responses. There is no partial credit. Unless otherwise indicated, answers must given in *exact* form, i.e. in terms of fractions, radicals, π, etc.

Name _____ **ANSWERS** _____

College _____

Home Address _____
(City, State, Zip Code)

Name of present math instructor _____ Math Course _____

1. $\frac{99}{20} = 4.95$

2. 80

3. E

4. 1010

5. 10

6. $\sqrt{41}$

7. E

8. A

9. z, w, y, x

10. $\frac{10}{2+\sqrt{29}} = \frac{2}{5}\left(\sqrt{29}-2\right)$

11. D

12. C

13. 10

14. C

15. C

16. D

17. $\left(\frac{1}{3}, -\frac{2}{3}\right)$

18. $4 + \sqrt{11}$

19. $k \in \left[\frac{17}{24}, \frac{25}{24}\right)$ or $\frac{17}{24} \le k < \frac{25}{24}$

20. 7

Correct ____20____ × 4 = ____80____

Incorrect ____0____ × −1 = ____0____

Total = ____80____