

41st Annual Dick Schaff Math Superbowl

Level 1 (Prealgebra) Huddle

Directions: Select the most correct answer for each question and mark it on your Scantron® sheet. N.O.T. stands for "None of These."

1. Simplify $1 - 2 + 3 - 4 + 5 - 6 \dots - 2014$.

- A) 1007 B) - 1007 C) 2014 D) - 2014 E) N.O.T.

2. Alex jogged thirty minutes at a speed of six miles per hour. How far did Alex jog?

- A) 1.8 miles B) 3 miles C) 18 miles D) 180 miles E) N.O.T.

3. It takes two eggs to make a dozen pancakes. A carton of eggs contains a dozen eggs, and the carton costs \$2 (you may ignore sales tax). If you may not buy a fraction of a carton of eggs, how much would you have to pay for the eggs to make 300 pancakes?

- A) \$4 B) \$8 C) \$12 D) \$16 E) N.O.T.

4. The perimeter of a square is fifty feet. What is its area?

- A) 25 sq. feet B) 156.25 sq. feet C) 625 sq. feet D) 2500 sq. feet E) N.O.T.

5. What is the reciprocal of $2.\overline{09}$?

- A) $\frac{19}{9}$ B) $\frac{9}{19}$ C) $\frac{23}{11}$ D) $\frac{11}{23}$ E) N.O.T.

6. What is 15% of 20% of 25?

- A) 0.75 B) 7.5 C) 60 D) 75 E) N.O.T.

7. Three different positive whole numbers add up to 18. Which of the following could NOT be the middle number?

- A) 3 B) 5 C) 7 D) 9 E) N.O.T.

25. Simplify $1.\bar{1} \times 2.\bar{2}$.

- A) 2.42 B) $2.\bar{42}$ C) $\frac{200}{121}$ D) $\frac{200}{81}$ E) N.O.T.

26. Simplify $|2 - 7| - |2 + 7|$.

- A) -4 B) 0 C) 4 D) 14 E) N.O.T.

27. Simplify $0^1 + 1^2 + 2^3 + 3^4$.

- A) 0 B) 1 C) 20 D) 90 E) N.O.T.

28. Let $A \& B = A^2 + B^2$. What is $5 \& (2 \& 3)$

- A) 38 B) 50 C) 169 D) 194 E) N.O.T.

29. What is the sum of all the factors of 30?

- A) 71 B) 72 C) 76 D) 84 E) N.O.T.

30. Which of the following is the largest?

- A) 0.001 B) $(0.02)^2$ C) $\frac{1}{900}$ D) $\left(\frac{1}{30}\right)^3$