

CONTESTANT ID #: _____

GRADE LEVEL : _____

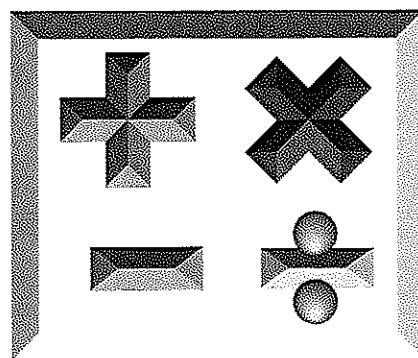
*Place Contestant ID label here BEFORE
Contest Begins*



Mathematics

District Contest

Grades 4-5



2022

FINAL SCORE: _____

(Please do not open test until the signal is given to begin.)

Directions: Choose the best answer for each of the following problems. Choice E is “NOT” for “None of these”.

1. $585 + 497 =$

- A. 1072 B. 1082 C. 1172 D. 1182 E. NOT

2. $28 + 29 + 30 + 31 + 32 =$

- A. 135 B. 140 C. 145 D. 150 E. NOT

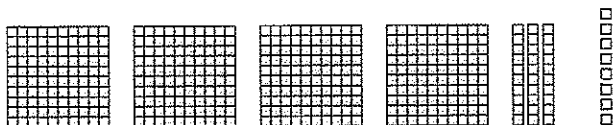
3. $54 \times 8 =$

- A. 422 B. 432 C. 442 D. 448 E. NOT

4. How many days are there in the month of October?

- A. 29 B. 28 C. 31 D. 30 E. NOT

5. What number is represented by these blocks?



- A. 834
B. 483
C. 438
D. 441
E. NOT

6. $\frac{3}{8} + \frac{5}{12} =$

- A. $\frac{11}{12}$ B. $\frac{19}{24}$ C. $\frac{13}{18}$ D. $\frac{39}{48}$ E. NOT

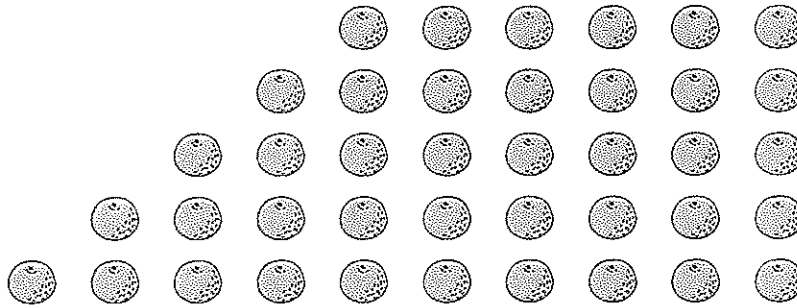
7. $2022 - 13 - 13 - 13 - 13 - 13 =$

- A. 1980 B. 1957 C. 1970 D. 1967 E. NOT

8. $(17 \times 9) + (18 \times 9) = 9 \times$ what number?
A. 306 B. 296 C. 33 D. 35 E. NOT
9. If T represents a single digit in $3T \times 8 = 312$, what is $T4 \times 6$?
A. 564 B. 504 C. 554 D. 514 E. NOT
10. Sarah has 47 books. Harriet has 64 books. Harriet gives eight of her books to Sarah. Sarah gives twelve of her books to Harriet. How many more books does Harriet have now than Sarah?
A. 29 B. 21 C. 25 D. 17 E. NOT
11. $1\frac{2}{3}$ hours = _____ minutes
A. 80 B. 100 C. 160 D. 90 E. NOT
12. $134 =$ _____ (Roman numerals)
A. CXXXIV B. CXXXIII C. DXXXIV D. MCCCIX E. NOT
13. $(8 \times 10) + (9 \times 1) + (3 \times \frac{1}{100}) =$ _____ (decimal)
A. 89.003 B. 890.3 C. 89.03 D. 89.3 E. NOT
14. What is the smallest prime number greater than 25?
A. 27 B. 29 C. 31 D. 33 E. NOT
15. $25 \times 47 =$
A. 1125 B. 1175 C. 1225 D. 1275 E. NOT

16. One bucket had $6\frac{3}{4}$ pounds of apples. Another bucket had $5\frac{3}{8}$ pounds of apples. How many more pounds of apples did the first bucket have?
- A. $1\frac{1}{8}$ pounds B. $1\frac{5}{8}$ pounds C. $1\frac{3}{4}$ pounds D. $1\frac{3}{8}$ pounds E. NOT
17. What is the remainder when 57356 is divided by 20?
- A. 12 B. 16 C. 14 D. 18 E. NOT
18. A car dealership sold 37 cars in May, 48 cars in June, and 53 cars in July. How many cars on average did they sell per month?
- A. 45 B. 44 C. 47 D. 46 E. NOT
19. What percent of 120 is 90?
- A. $66\frac{2}{3}\%$ B. 72% C. 75% D. 80% E. NOT
20. Reduce $\frac{48}{112}$ to lowest terms.
- A. $\frac{3}{8}$ B. $\frac{9}{16}$ C. $\frac{3}{7}$ D. $\frac{5}{14}$ E. NOT
21. Add: 7 yards 1 foot 11 inches + 5 yards 2 feet 10 inches
- A. 13 yards 1 foot 9 inches B. 13 yards 2 feet 1 inch
C. 12 yards 1 foot 9 inches D. 12 yards 2 feet 1 inch E. NOT

22. How many oranges are shown?



- A. 35 B. 40 C. 45 D. 50 E. NOT

23. Evaluate $a = 12$ and $b = 5$ in $a^2 - 2ab + b^2$.

- A. 49 B. 60 C. 48 D. 54 E. NOT

24. When the numbers $\frac{7}{10}$, 0.67 , $\frac{2}{3}$, 0.74 , and $\frac{3}{4}$ are placed in order from least to greatest, which position in $\frac{3}{4}$ in?

- A. 3rd B. 5th C. 4th D. 2nd E. NOT

25. $0.24 =$ _____ (fraction)

- A. $\frac{4}{15}$ B. $\frac{7}{40}$ C. $\frac{6}{25}$ D. $\frac{3}{20}$ E. NOT

26. Which of the following is not a divisor of 1350?

- A. 21 B. 27 C. 45 D. 54 E. NOT

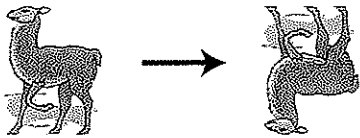
27. Lasagna costs \$12.00. Salad costs \$4.00. Drinks cost \$2.50. Levi ordered the lasagna with a salad and a drink. The sales tax is 8%. What was the total cost?

- A. \$19.98 B. \$20.18 C. \$20.38 D. \$20.58 E. NOT

28. The perimeter of a rectangle is 80 cm. Its length is 1 cm longer than twice its width. What is its length?

- A. 23 cm B. 25 cm C. 27 cm D. 29 cm E. NOT

29. Which transformation is shown here?



- A. reflection over a vertical line
B. reflection over a horizontal line
C. 90° rotation clockwise
D. 90° rotation counterclockwise
E. NOT

30. Ryan has \$8.80 in half-dollars and dimes. What is the least number of coins he could have?

- A. 18 B. 19 C. 20 D. 21 E. NOT

31. $(8 - 3) \times (8 - 4) \times (8 - 5) \times (8 - 6) \times (8 - 7) =$

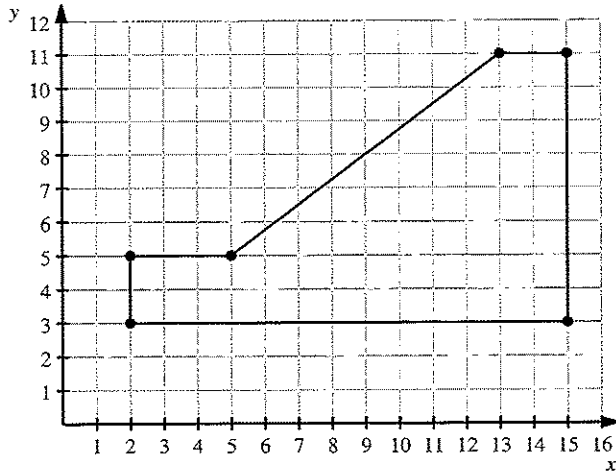
- A. 720 B. 120 C. 240 D. 24 E. NOT

32. Solve for J : $3J - 5 = 16$

- A. 10 B. 9 C. 8 D. 7 E. NOT

PSIA — Mathematics – Grades 4 and 5

33. What is the unit's digit of the result of $(8733 \times 4368) + 1809$?
- A. 2 B. 3 C. 5 D. 4 E. NOT
34. What symbol goes in the box? $5\frac{3}{7} \div 2\frac{1}{2}$ $5\frac{3}{7} \div 2\frac{1}{5}$
- A. < B. > C. = D. cannot be determined E. NOT
35. What digit is in the hundred-thousandth's place of the decimal representation of $\frac{77}{333}$?
- A. 2 B. 0 C. 1 D. 3 E. NOT
36. A restaurant currently has 5 waiters. How many ways can the manager choose 2 waiters to work an extra shift?
- A. 10 B. 20 C. 7 D. 25 E. NOT
37. Find the perimeter of this shape.



- A. 35
B. 37
C. 36
D. 38
E. NOT

38. What is the smallest positive 4-digit number than can be added to 58137 to make a number that is evenly divisible by 9?
- A. 1002 B. 1003 C. 1004 D. 1005 E. NOT
39. If $3a + 4b = 6$, what is $12 - 6a$?
- A. $8b$ B. $4b + 2$ C. $4b - 2$ D. $2b$ E. NOT
40. The ratio of Bulldog fans to Mustang fans at a recent game was 8 : 7. If 720 people attended, how many Bulldog fans were there?
- A. 336 B. 348 C. 384 D. 396 E. NOT



Mathematics Grades 4-5

District Contest

Contestant Answer Sheet

GRADERS: Write scores and initial.

Score 1: _____

Score 3: _____

Score 2: _____

FINAL: _____

Contestant ID: _____ Grade Level: _____

INSTRUCTIONS: Place the PRINTED CAPITAL letter of each answer choice (A, B, C, D, or E) in the blank corresponding to the test item number. SCORING: +5 for each correct answer; -2 for each incorrect answer; no deduction for skipped or unanswered items. Visible erasures and mark-outs constitute a 2-point deduction ONLY if a correct answer is not written in the answer space.

1. _____

16. _____

31. _____

2. _____

17. _____

32. _____

3. _____

18. _____

33. _____

4. _____

19. _____

34. _____

5. _____

20. _____

35. _____

6. _____

21. _____

36. _____

7. _____

22. _____

37. _____

8. _____

23. _____

38. _____

9. _____

24. _____

39. _____

10. _____

25. _____

40. _____

11. _____

26. _____

12. _____

27. _____

13. _____

28. _____

14. _____

29. _____

15. _____

30. _____



Mathematics Grades 4-5

ANSWER KEY

District 2022

REMINDERS: PRINTED CAPITAL letters only. SCORING: +5 for each correct answer; -2 for each incorrect answer; no deduction for skipped or unanswered items. Visible erasures and mark-outs constitute a 2-point deduction ONLY if a correct answer is not written in the answer space.

- | | | |
|--------------|--------------|--------------|
| 1. B | 16. D | 31. B |
| 2. D | 17. B | 32. D |
| 3. B | 18. D | 33. B |
| 4. C | 19. C | 34. A |
| 5. C | 20. C | 35. D |
| 6. B | 21. A | 36. A |
| 7. B | 22. B | 37. D |
| 8. D | 23. A | 38. A |
| 9. A | 24. B | 39. A |
| 10. C | 25. C | 40. C |
| 11. B | 26. A | |
| 12. A | 27. A | |
| 13. C | 28. C | |
| 14. B | 29. B | |
| 15. B | 30. C | |