PSIA

25 YEARS

Inspiring Student Achievement

Mathematics

District Contest

Grades 2-3
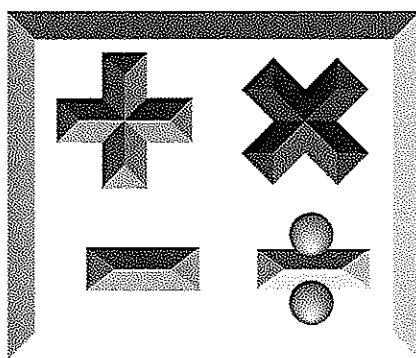
2022

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.

1. $27 + 34 =$

   A. 51   **B.** 53   **C.** 61   **D.** 63
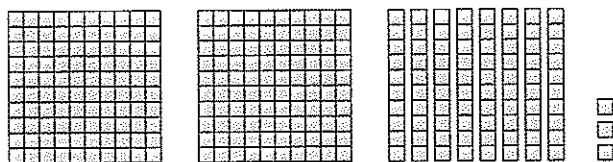
2. $63 - 17 =$

   A. 46   **B.** 56   **C.** 44   **D.** 54

3. $16 + 18 + 20 + 22 + 24 =$

   A. 115   **B.** 110   **C.** 100   **D.** 105

4. $581 + 337 - 148 =$

   A. 763   **B.** 770   **C.** 773   **D.** 780

5. What number is represented by the following figure?

   **A.** 273
   B. 283
   C. 237
   D. 238

6. How many minutes are there in two hours?

   A. 200   **B.** 90   **C.** 30   **D.** 120

7. Anna has forty-six candies. Emily has thirty-four candies. How many candies should Anna give Emily so that they have the same amount?

    A. 2   **B.** 4   **C.** 6   **D.** 8

8. XXI = _____ (Arabic numerals)

    A. 11   **B.** 21   **C.** 12   **D.** 201

9. How many times will you need to write the digit "3" if you write down all whole numbers between 25 and 46?

    A. 12   **B.** 13   **C.** 14   **D.** 15

10. $599 + 497 + 896 =$

    A. 1982   **B.** 1992   **C.** 1984   **D.** 1994

11. $37 \times 7 =$

    A. 369   **B.** 359   **C.** 259   **D.** 269

12. How many cars are shown?
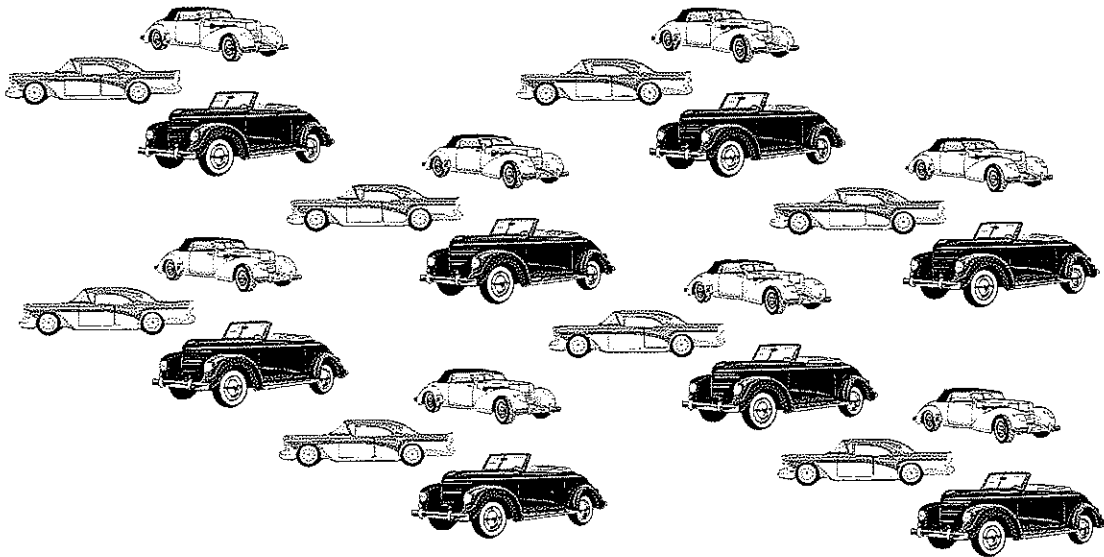
   A. 28   **B.** 27   **C.** 24   **D.** 21

13. Ms. Riley has 18 boxes. Each box has 7 pencils. How many total pencils does she have?

   A. 25   **B.** 11   **C.** 116   **D.** 126

14. Sarah has 18 quarters and 15 dimes. How much money does she have?

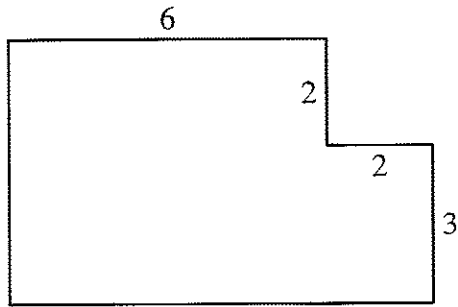   **A.** $5.80   **B.** $6.00   **C.** $6.20   **D.** $6.40

15. Find the area.

A. 38

B. 36

C. 34

D. 32

16. What single digit goes in the boxes? $\square 4 \times 6 \square = 3 \square 10$

   A. 2   B. 8   C. 5   D. 7

17. Which common item is in the shape of a sphere?

   A. DVD   B. pencil   C. globe   D. tire

18. What number goes in the box? $\square - 381 = 642$

   A. 221   B. 261   C. 1013   D. 1023

19. $56 \times 31 =$

   A. 1646   B. 1746   C. 1636   D. 1736

20. If July 4th falls on a Saturday, what day of the week will July 29th fall on (same year)?

   A. Tuesday   B. Wednesday   C. Thursday   D. Friday

21. A cell phone screen holds a 4 by 6 rectangular array of app icons. How many screens are needed to hold 192 app icons?

    A. 6   **B.** 7   **C.** 8   **D.** 9

22. $350 \div 7 =$

    A. 50   **B.** 15   **C.** 35   **D.** 40

23. Reduce $\dfrac{75}{225}$ to lowest terms.

    A. $\dfrac{1}{3}$ **B.** $\dfrac{1}{4}$ **C.** $\dfrac{2}{5}$ **D.** $\dfrac{1}{5}$

24. $18 + 18 + 18 + 18 = 9 \times$ what number?

    A. 4   **B.** 8   **C.** 6   **D.** 12

25. A farmer has 8 rows of corn. Each row produces 235 ears. Each ear sells for $1.50. How much money does the farmer earn from selling corn?

    A. $2820   **B.** $3240   **C.** $2960   **D.** $3180

26. What is the 41st number in the sequence 3, 7, 11, 15, . . .?

    A. 171   **B.** 167   **C.** 163   **D.** 159

27. What fraction of the furniture shown are sofas (couches)?
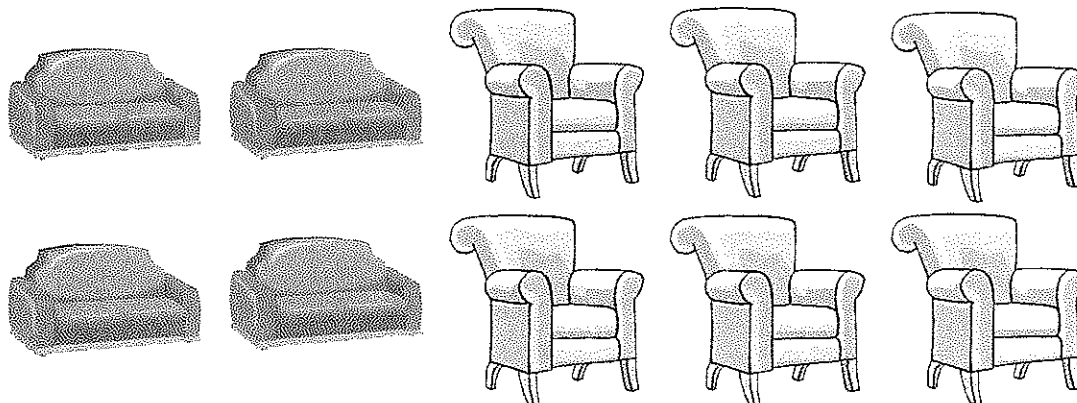
A. $\dfrac{3}{8}$ B. $\dfrac{2}{3}$ C. $\dfrac{2}{5}$ D. $\dfrac{1}{3}$

28. The area of a rectangle is 144 cm^2. If the length is 16 cm, what is the width?
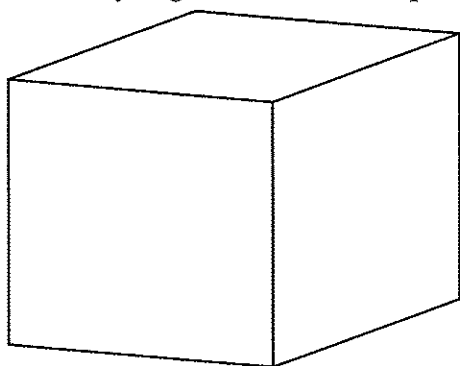
A. 6 cm   B. 12 cm   C. 8 cm   D. 9 cm

29. How many edges does this solid prism have?

A. 6

B. 12

C. 8

D. 10

30. Two angles of a triangle are 41° and 39°. What is the third angle of the triangle?

   A. 20°   **B.** 90°   **C.** 80°   **D.** 100°

31. Abdul rides his bike to school. His school is 8400 feet away. He pedals at 600 feet per minute. How long will it take him to get to school?

   A. 14 minutes   **B.** 16 minutes   **C.** 12 minutes   **D.** 13 minutes

32. Which of the following is a divisor of 390?

   A. 6   **B.** 9   **C.** 12   **D.** 7

33. $15.83 + 16.98 =$

   A. 31.41   **B.** 31.81   **C.** 33.41   **D.** 32.81

34. A café has four types of coffee. How many different ways can the coffees be listed on the menu?

   A. 8   **B.** 16   **C.** 24   **D.** 12

35. What operation goes in the box to make the statement true? $6 \boxed{} (5 - 2) = 9$

   A. +   **B.** −   **C.** ×   **D.** ÷

36. Ximena scored 97, 100, and 88 on her three tests. What is her average score?

   A. 96   **B.** 95   **C.** 94   **D.** 93

37. What is three-fourths of 84?

    A. 54   **B.** 58   **C.** 69   **D.** 63

38. $(81 + 79 + 77 + 75 + 73) - (49 + 47 + 45 + 43 + 41) =$

    A. 170   **B.** 160   **C.** 150   **D.** 140

39. Erika takes 40 minutes to drive from home to work. Because of lighter traffic, she can drive twice as fast on the trip from work back home. How long will it take her to drive home?

    A. 20 minutes

    B. 40 minutes

    C. 80 minutes

    D. Cannot be determined since we do not know how far she lives from work.

40. A room is 12 feet long by 8 feet wide. A designer has tiles measuring 5-foot by 3-foot and 1-foot by 1-foot, as shown. What is the least number of 1-foot by 1-foot tiles the designer needs to use when covering the floor, using as many of both types of tiles as necessary, without overlapping the tiles?
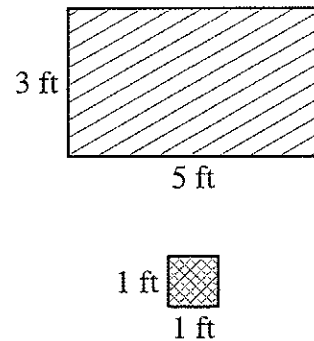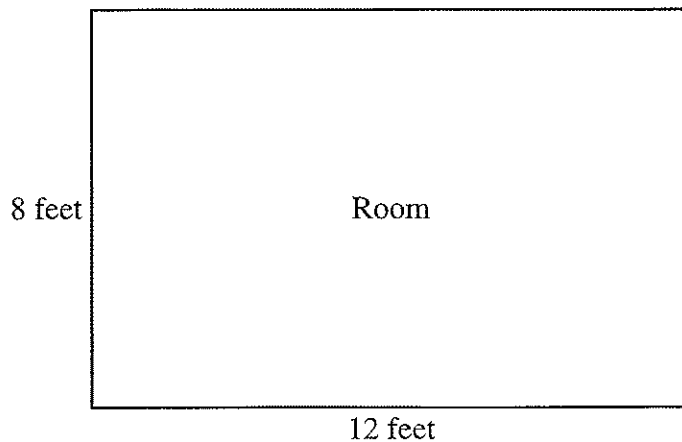
    A. 8   **B.** 12   **C.** 4   **D.** 6

Mathematics Grades 2-3

District Contest

Contestant Answer Sheet

Contestant ID: _____ Grade Level: _____

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INSTRUCTIONS: Place the PRINTED CAPITAL letter of each answer choice (A, B, C, or D) 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. _____

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