CONTESTANT ID #: _____

GRADE LEVEL :_____

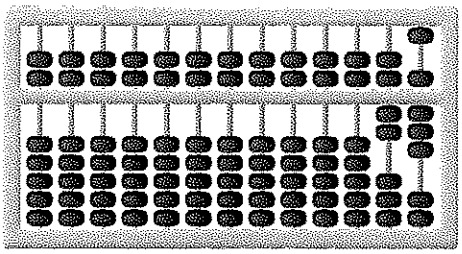
Place Contestant ID label here AFTER grading

PSIA
Private Schools Interscholastic Association

Number Sense

District Contest

Grades 4-5



2023

Grader #1 Score: _____

Grader #2 Score: _____

Grader #3 Score: _____

FINAL SCORE: _____

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

1. $72 + 34 =$ _____
2. $158 - 115 =$ _____
3. $534 + 699 =$ _____
4. $4 \times 6 =$ _____
5. $21 \div 3 =$ _____
6. LXVIII = _____ (Arabic numerals)
7. Round 5846 to the nearest ten's place. _____
8. $13 + 17 + 16 =$ _____
9. $68 \times 5 =$ _____
* 10. $845 + 731 + 913 + 1413 =$ _____
11. $70 \times 60 =$ _____
12. $8 + 9 + 10 + 11 + 12 =$ _____
13. $37 \times 11 =$ _____
14. $9587 - 6390 =$ _____
15. $4 \times 3 \times 2 =$ _____
16. $(5 \times 100) + (6 \times 1000) =$ _____
17. $2023 + 1917 =$ _____
18. $432 \div 8 =$ _____
19. What is the product of the digits in the ten's place and hundred's place of 54,387? _____
* 20. $704 \times 495 =$ _____
21. $\frac{3}{4} - \frac{1}{4} =$ _____ (fraction)
22. Which is larger: $\frac{7}{9}$ or $\frac{5}{7}$? _____
23. $48 \times 52 =$ _____
24. 60% = _____ (fraction)
25. What is the smallest prime number greater than 13? _____
26. $37.85 + 11.55 =$ _____ (decimal)
27. $25 \times 19 =$ _____
28. $52 - 13 \times 4 =$ _____
29. One-third of a foot is _____ inches
* 30. $314597 \div 792 =$ _____
31. $71 \times 79 =$ _____
32. Write $\frac{17}{50}$ as a decimal. _____
33. $1.2 \times 1.2 =$ _____ (decimal)
34. If 2 pies cost \$4.10, how much will 8 pies cost? \$ _____
35. The LCM of 15 and 25 is _____
36. 5 is to 9 as 20 is to _____
37. How many pints are in one gallon? _____
38. $32 \div 0.4 =$ _____
39. $85^2 =$ _____
* 40. $\sqrt{157849} =$ _____
41. $6\frac{1}{8} + 2\frac{1}{4} =$ _____ (mixed number)
42. 122 (base 4) = _____ (base 10)

43. The perimeter of a rectangle whose length is 17 inches and width is 4 inches is _____ inches

44. If $M = 7$, then $2M - 1 =$ _____

45. 25 centimeters = _____ meters (fraction)

46. $2 + 4 + 6 + 8 + \ldots + 22 =$ _____

47. $3\frac{2}{5} \times 2\frac{2}{5} =$ _____ (mixed number)

48. The 10th term in the sequence 3, 6, 9, 12, ... is _____

49. $\sqrt{81} =$ _____

* 50. $251\pi^5 =$ _____

51. Gasoline costs \$3.65 per gallon. How much will 8 gallons of gas cost? \$ _____

52. 40% of 130 is _____

53. A triangle with base 9 mm and height 14 mm has an area of _____ mm^2

54. $\frac{9}{11} + \frac{11}{9} =$ _____ (mixed number)

55. If $2x - 13 = 1$, then $x =$ _____

56. $\frac{14}{15} \times \frac{5}{7} =$ _____

57. $19^2 - 11^2 =$ _____

58. 3 square feet = _____ square inches

59. Set A = {p, o, i, n, t}. How many total subsets of A are there? _____

* 60. $125 \times 483 =$ _____

61. A right triangle has legs of 5 and 12. Its hypotenuse is _____

62. $77 - (-28) =$ _____

63. What percent of 200 is 44? _____ %

64. $5\frac{7}{9} \times 5\frac{2}{9} =$ _____ (mixed number)

65. The multiplicative inverse of $\frac{1}{6}$ is _____

66. $15^2 + 45^2 =$ _____

67. $\frac{1}{3} - \frac{1}{7} =$ _____

68. The area of a rhombus with diagonals 8 inches and 7 inches is _____ square inches

69. $19 - 18 - 17 =$ _____

* 70. $34 \times 35 \times 38 =$ _____

71. The central angle of a regular hexagon is _____ degrees

72. $111 \times 342 =$ _____

73. The volume of a cube whose sides measure 6 cm is _____ cm^3

74. $26_8 + 35_8 =$ _____ 8

75. $5\frac{1}{4} \div \frac{7}{8} =$ _____

76. 12% of 49 is 7% of _____

77. What number is halfway between −18 and −2 on the number line? _____

78. If $7y + 3 \leq 31$, then $y \leq$ _____

79. $\frac{10}{13} \times 10 =$ _____ (mixed number)

* 80. $(13 + 14 + 15 + 16 + 17)^3 =$ _____

For each estimation problem, the exact value (rounded to two decimal places) appears in square brackets.

(1) 106

(2) 43

(3) 1233

(4) 24

(5) 7

(6) 68

(7) 5850

(8) 46

(9) 340

***(10)** 3707 – 4097
[3902]

(11) 4200

(12) 50

(13) 407

(14) 3197

(15) 24

(16) 6500

(17) 3940

(18) 54

(19) 24

***(20)** 331056 – 365904
[348480]

(21) $\frac{1}{2}$

(22) $\frac{7}{9}$

(23) 2496

(24) $\frac{3}{5}$

(25) 17

(26) 49.4

(27) 475

(28) 0

(29) 4

***(30)** 378 – 417
[397.22]

(31) 5609

(32) .34

(33) 1.44

(34) 16.40

(35) 75

(36) 36

(37) 8

(38) 80

(39) 7225

***(40)** 378 – 417
[397.30]

(41) $8\frac{3}{8}$

(42) 26

(43) 42

(44) 13

(45) $\frac{1}{4}$

(46) 132

(47) $8\frac{4}{25}$

(48) 30

(49) 9

***(50)** 72971 – 80651
[76810.94]

(51) 29.20

(52) 52

(53) 63

(54) $2\frac{4}{99}$

(55) 7

(56) $\frac{2}{3}$

(57) 240

(58) 432

(59) 32

***(60)** 57357 – 63393
[60375]

(61) 13

(62) 105

(63) 22

(64) $30\frac{14}{81}$

(65) 6

(66) 2250

(67) $\frac{4}{21}$

(68) 28

(69) −16

***(70)** 42959 – 47481
[45220]

(71) 60

(72) 37962

(73) 216

(74) 63

(75) 6

(76) 84

(77) −10

(78) 4

(79) $7\frac{9}{13}$

***(80)** 400782 – 442968
[421875]