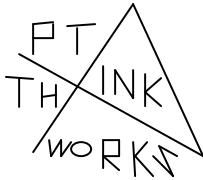


Name: _____
School: _____
Grade: 4 th 5 th



Elementary General Math #2 2014-2015

General Directions

This test will last for 40 minutes. There are 50 problems on the test.

Write all answers on your answer sheet.

Always use capital letters on your answer sheet.

You may write on the test and show work on the test. You are not required to show any of your work or calculations.

You may skip around on the test. All problems have only one correct answer.

Calculators may NOT be used on this test.

Scoring: All problems correctly answered are worth 5 points. Two points will be subtracted for all problems answered incorrectly. No points are subtracted for problems that are skipped.

Tiebreakers: (1) Percent accuracy (2) First problem missed (not counting skips).

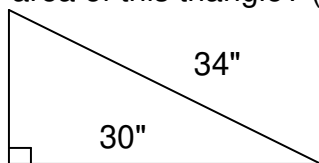
Elementary Math Test #2

General Math Test – 4th and 5th Grade

Choose the letter of the correct answer. You may skip around on this test.

1. Ella subtracted 86 from 324. What was her result?
A. -232 B. 410 C. 238 D. 234 E. 248
2. Katelyn was born on September 18, 2008. Her older sister, Hailey, has a birthday on June 10th. At Hailey's birthday party, Katelyn calculated the number of days until her next birthday. She shared this number with her mom. What was the number of days until Katelyn would have her next birthday?
A. 100 B. 101 C. 99 D. 98 E. 102
3. In triangle ABC, the measure of angle A is 53° . The measure of angle C is 17° . What is the measure of angle B?
A. 291° B. 110° C. 111° D. 91° E. 180°
4. Simplify: $65 + 45 + 12$
A. 122 B. 112 C. 132 D. 123 E. 121
5. What is the smallest composite number from these choices?
A. 27 B. 2 C. 12 D. 7 E. 14
6. What is the sum of 22 and 18?
A. 4 B. 40 C. 30 D. 396 E. 42
7. A polygon with 9 sides is called a(an):
A. hexagon B. nonagon C. octagon D. nineagon E. dodecagon
8. Katelyn went to the store and bought 4 necklaces for \$4.35 each. How much did she pay in sales tax if the tax rate was 7.5%?
A. \$18.31 B. \$1.29 C. \$1.31 D. \$13.05 E. \$1.51

9. What is the area of this triangle? (to the nearest integer)

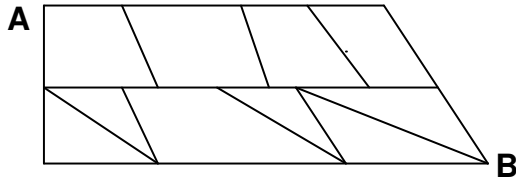


- A. 210 in² B. 250 in² C. 280 in² D. 270 in² E. 240 in²
10. How many prime numbers are between 23 and 99?
- A. 17 B. 15 C. 18 D. 16 E. 14
11. Hailey had a collection of scarfs. She had 4 red ones, 4 blue ones, and 7 orange ones. What are the odds that she would blindly pick an orange scarf out of the drawer where she kept the collection?
- A. $\frac{7}{9}$ B. $\frac{7}{15}$ C. $\frac{7}{8}$ D. $\frac{8}{15}$ E. $\frac{8}{7}$
12. Four consecutive integers have a product that is 441 more than 72,999. What is the largest of these integers?
- A. 17 B. 18 C. 19 D. 16 E. 20
13. What is the sum of 56,567,432 and 35,281,563 and 53,462,987?
- A. 145322982 B. 145211982 C. 145312982 D. 14531982 E. 145311982
14. What is the value of 4 quarters, 7 dimes, and 17 pennies?
- A. \$1.87 B. \$1.77 C. \$4.87 D. \$1.67 E. \$1.37
15. What is the sum of the factors of 33,696?
- A. 109422 B. 103122 C. 106724 D. 106722 E. 106422
16. What is the name of a polygon with 6 sides?
- A. heptagon B. decagon C. hexagon D. dodecagon E. nonagon
17. Which value is the reciprocal of $\frac{8}{23}$?
- A. 8.23 B. 2.625 C. 2.75 D. 2.875 E. 23.8

18. What is the units digit of 4^{385} ?

- A. 1 B. 6 C. 2 D. 4 E. 8

19. How many paths exist from top corner A to bottom corner B? You may only move to the right or down or diagonally down. A. 15 B. 13 C. 17 D. 16 E. 20



20. Eight students decided to run for office in their school math club. Their names were Ayden, Rylie, Wesley, Hailey, Katelyn, Ella, Ally, and Lindsey. The student who received the most votes would be president, the second most would be vice president, and the one who received the third most votes would be the secretary. How many possibly ways could 3 of the 8 students be elected to these positions?

- A. 336 B. 56 C. 366 D. 24 E. 6720

21. How many distinct integral factors does 144 have? (Hint: The factors of 10 are 1, 2, 5, and 10.)

- A. 15 B. 8 C. 10 D. 144 E. 2

22. How many subsets does set G have? Set $G = \{H, \uparrow, \oplus, \cup, \$, W, \#\}$.

- A. 256 B. 64 C. 128 D. 63 E. 127

23. The sum of seventy and eighty is:

- A. 150 B. 15 C. 160 D. 78 E. 5600

24. Trigonometry is based on the geometry of triangles. Three trig ratios are sine, cosine, and tangent. Which fraction below refers to the sine ratio?

- A. $\frac{A}{O}$ B. $\frac{A}{H}$ C. $\frac{O}{H}$ D. $\frac{O}{A}$ E. $\frac{H}{A}$

25. What is the product of the median and mode of 4, 19, 4, 26, 74, 36, 34, 8, and 2?

- A. 104 B. 66 C. 60 D. 76 E. 92

26. What is the sum of the odd digits of 902,316,903,785?

- A. 53 B. 37 C. 39 D. 30 E. 22

27. What is the mean of 6, 36, 14, 36, 74, 36, 72, 36, 4, and 44?

- A. 36.2 B. 37 C. 34.2 D. 35 E. 35.8

28. If $A \odot B = (A \times B) + 2(4B + 3A)$, then what is the value of $7 \odot 12$?

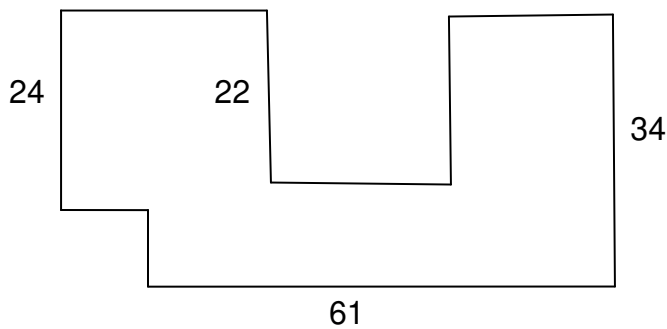
- A. 222 B. 212 C. 982 D. 153 E. 210

29. What is the sum of 18 and 87?

- A. 105 B. 115 C. 1566 D. 106 E. 116

30. What is the 12th number in this pattern: 0, 1, 8, 27, 64, 125, __, __, __, __?
A. 1728 B. 491 C. 1111 D. 1331 E. 2197
31. How many integers are perfect cubes between 100 and 2000?
A. 10 B. 9 C. 11 D. 7 E. 8
32. The greatest common factor of 737 and 20207 is:
A. 67 B. 77 C. 97 D. 31 E. 11
33. Ayden loves math. One day, he wrote the first 12 rows of Pascal's triangle in his notebook. Knowing that the top row is called row zero, he decided to add the numbers in each row. What was the sum of the numbers in rows 3 and 8?
A. 260 B. 264 C. 272 D. 518 E. 262
34. How many numbers between 25 and 570 are multiples of 3?
A. 182 B. 180 C. 181 D. 190 E. 191
35. What is the product of 13 and 17?
A. 221 B. 211 C. 191 D. 151 E. 30
36. $752.25 \text{ m} = \underline{\hspace{2cm}} \text{ mm}$
A. 752250 B. 7522500 C. 7.5225 D. 752.25 E. 0.75225
37. The intersection of the medians of any triangle is the:
A. incenter B. hypotenuse C. orthocenter D. abscissa E. centroid
38. What is the total sum of the degrees of all of the exterior angles in one regular hexagon?
A. 900 B. 720 C. 180 D. 360 E. 1080
39. How many distinct arrangements of the word MONTANA are possible?
(Hint: The arrangement does not have to spell a correct word. ANTANOM would count as an arrangement.)
A. 5,040 B. 2,620 C. 1,260 D. 630 E. 21
40. $103 + 757 =$
A. 770 B. 860 C. 760 D. 870 E. 880

41. Simplify: $486 \times 258 + 432 \times 912 + 734 \times 208 - 896 \times 456$
A. 262468 B. 261468 C. 263378 D. 263468 E. 272468
42. $(884 \div 4) + (25 \times 76) + (807 - 163) =$
A. 2565 B. 2665 C. 2666 D. 2464 E. 2041
43. The product of the Roman numeral XIV and 64 is:
A. 996 B. 876 C. 906 D. 896 E. 886
44. What is the prime factorization of 3000?
A. $2^3 \times 3^2 \times 5^2$ B. $2^3 \times 3 \times 5^2$ C. $2^3 \times 3^2 \times 5$ D. $2 \times 3^3 \times 5^2$ E. $2^3 \times 3 \times 5^3$
45. What is the area in square inches of a rectangle with a width of 17 in. and a length that is eight less than twice the width?
A. 342 B. 442 C. 476 D. 448 E. 86
46. What is the square root of 4,624?
A. 62 B. 67.2 C. 72 D. 78 E. 68
47. Find the product of 87 and 83.
A. 7,221 B. 6,421 C. 6,221 D. 5,621 E. 5,611
48. Find the perimeter of this figure. The figure represents a rectangle with 2 squares missing.



- A. 224 B. 312 C. 244 D. 234 E. 274
49. What is the area of the figure in #48?
A. 880 B. 1590 C. 1490 D. 1830 E. 1930
50. The time 37.2 hours past 1:24 pm would be:
A. 2:44 am B. 1:36 am C. 2:46 am D. 2:36 am E. 2:34 am

KEY for 4th - 5th

- 1. C
- 2. A
- 3. B
- 4. A
- 47. A
- 48. D
- 49. D
- 50. D

Answer distribution

A 11 B 9 C 9 D 13 E 8

- 5. C
- 6. B
- 7. B
- 8. C
- 9. E
- 10. D
- 11. C
- 12. B
- 13. E
- 14. A
- 15. D
- 16. C
- 17. D
- 18. D
- 19. D
- 20. A
- 21. A
- 22. C
- 23. A
- 24. C
- 25. D
- 26. B
- 27. E
- 28. A
- 29. A
- 30. D
- 31. E
- 32. E
- 33. B
- 34. C
- 35. A
- 36. A
- 37. E
- 38. D
- 39. C
- 40. B
- 41. D
- 42. B
- 43. D
- 44. E
- 45. B
- 46. E