2021 – 2022 TMSCA Elementary School (1st – 3rd) Invitational Mathematics Test

1. 3 + 11 = _____
A. 8 B. 15 C. 14 D. 9 E. 33

2. 12 – 7 = _____
A. 5 B. 6 C. 4 D. 84 E. 19

3. 3 × 8 = _____
A. 11 B. 24 C. 5 D. 16 E. 21

4. 15 + 5 + 7 = _____
A. 10 B. 1 C. 2 D. 37 E. 27

5. What is the name of the shape below?

A. octagon B. trapezoid C. rectangle D. pentagon E. hexagon

6. What is the next term in the sequence 23, 19, 15, 11, 7, …?
A. 4 B. 3 C. 2 D. 0 E. 1

7. If today is Saturday, what day of the week will it be in 8 days?
A. Sunday B. Monday C. Tuesday D. Thursday E. Friday

8. Which number is five hundred sixty-seven?
A. 576 B. 5,670 C. 567 D. 765 E. 657

9. 1 quarter + 4 nickels = _____
A. 30¢ B. 29¢ C. 60¢ D. 45¢ E. 65¢

10. Michael has 8 marbles and Lucy has 9 marbles. How many marbles to the two people have combined?
A. 15 B. 16 C. 17 D. 18 E. 19

11. What shape is next in the pattern? ♦, ♥, ♣, ♫, ▼, ♦, ♥, ♣, ♫, ▼, ♦, ♥, ♣, ♫, ▼, ♦, ♥, ♣, …
A. ♦ B. ♥ C. ♣ D. ♫ E. ▼

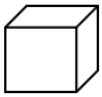
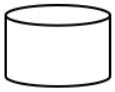
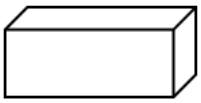
12. 10 – 1 – 2 – 3 + 6 = _____
A. 0 B. 7 C. 8 D. 9 E. 10

13. What is the sum of the digits in the number 2,021?
A. 4 B. 5 C. 6 D. 3 E. 0

14. Which number below has the greatest value?
A. 124 B. 120 C. 116 D. 111 E. 102

15. Anthony gets $7.00 for allowance each week. If Anthony saves his money, how much money will Anthony have after 6 weeks?
A. $42.00 B. $36.00 C. $13.00 D. $56.00 E. $21.00

16. Which of the following is a cylinder?

A.  B.  C.  D.  E. 

17. Which sum below has the greatest value?

A. 12 + 6 B. 11 + 8 C. 4 + 18 D. 1 + 20 E. 3 + 16

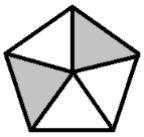
18. What time is on the clock below?

A. 3:15 pm B. 3:30 pm C. 12:00 pm D. 12:15 pm E. 3:00 pm

19. 1 week = _____ days

A. 4 B. 5 C. 6 D. 7 E. 8

20. What part of the pentagon below is shaded?



A. ⅔ B. ⅘ C. ½ D. ⅗ E. ⅖

21. Which symbol should go in the circle to make a true statement?

22 ◯ 19

A. < B. = C. > D. # E. %

22. Clint has six less crayons than Michelle. If Michelle has 22 crayons, how many crayons does Clint have?

A. 28 B. 16 C. 132 D. 18 E. 6

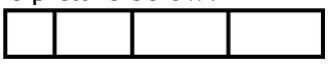
23. 67 + 44 = _____

A. 103 B. 113 C. 111 D. 23 E. 107

24. Which number comes next in the sequence 44, 40, 36, 32, …?

A. 30 B. 36 C. 26 D. 24 E. 28

25. How many rectangles can be found in the picture below?



A. 10 B. 12 C. 8 D. 6 E. 4

26. Samantha bought three books that each cost $7.00. How much was Samantha's total bill?

A. $14.00 B. $7.00 C. $28.00 D. $21.00 E. $3.50

27. It is now 10:50 am. What time will it be in 25 minutes?
A. 10:75 am B. 11:15 am C. 11:05 am D. 11:25 am E. 11:35 am

28. What is the number 582 rounded to the nearest ten?
A. 600 B. 582 C. 580 D. 590 E. 570

29. How many nickels are there in 35 cents?
A. 6 B. 5 C. 9 D. 8 E. 7

30. Which of the following is true?
A. 34 > 45 B. 72 > 80 C. 55 < 12 D. 26 > 22 E. 43 < 23

31. How many months are in 1 year?
A. 12 B. 6 C. 18 D. 10 E. 5

32. Which digit is in the hundreds place in the number 98,765?
A. 9 B. 8 C. 7 D. 6 E. 5

33. What time is on the clock below?

A. 7:30 am B. 8:30 am C. 6:37 am D. 6:38 am E. 6:40 am

34. Which list shows the numbers in order from greatest to least value?
A. 65, 57, 77 B. 28, 45, 66 C. 11, 55, 33 D. 72, 49, 12 E. 16, 8, 20

35. Luke bought 3 packs of baseball cards and 2 packs of football cards. If each pack of cards has 4 cards, how many cards in total does Luke have?
A. 20 B. 16 C. 24 D. 13 E. 14

36. Which number is odd?
A. 16 B. 23 C. 4 D. 88 E. 36

37. The dot plot represents which set of numbers?

A. 1, 2, 3, 4, 5 B. 1, 2, 2, 3, 4, 4, 4, 5 C. 1, 2, 2, 2, 3, 4, 5 D. 1, 2, 3, 4, 4, 5, 5 E. 1, 2, 2, 3, 3, 4, 4, 4, 5

38.In the number 45,287, which digit is in the hundreds place?
A. 4 B. 5 C. 2 D. 8 E. 7

39. 6 quarters + 4 dimes + 7 pennies = _____
A. $1.97 B. $1.87 C. $1.47 D. $1.77 E. $1.27

40. Which symbol should go in the circle to make a true statement?

$$11 + 29 \bigcirc 8 + 30$$

A. > B. $ C. < D. = E. ¢

41. $15 \div 5 =$ _____

A. 3 B. 10 C. 20 D. 75 E. 5

42. 29 minutes + 44 minutes + 37 minutes = _____

A. 1 hour 40 minutes B. 1 hour 30 minutes C. 2 hours 20 minutes D. 2 hours 10 minutes E. 1 hour 50 minutes

43. If each square below is 1 square inch, what is the area of the rectangle in square inches?

A. 24 square inches B. 10 square inches C. 20 square inches D. 21 square inches E. 14 square inches

44. What fraction can be used to represent how many eggs are brown if 9 out of 18 eggs are brown?

A. ¼ B. ½ C. ⅓ D. ⅕ E. ⅛

45. Which number should replace the square to make the equation true?

$$27 + 6 + \square = 52$$

A. 17 B. 16 C. 18 D. 20 E. 19

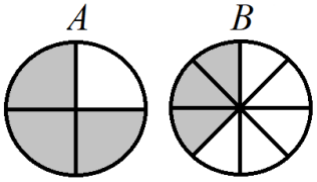
46. $26 \times 4 =$ _____

A. 108 B. 106 C. 104 D. 102 E. 110

47. There are 8 basketball teams in the tournament. If each team has 9 players, how many basketball players are at the tournament?

A. 72 B. 17 C. 34 D. 68 E. 36

48. Using the picture below, which statement is true?



A. $A < B$ B. $A = B$ C. $B > A$ D. $A > B$ E. $B = A$

49. What is the perimeter of a square with a side length of 12 inches?

A. 36 inches B. 48 inches C. 144 inches D. 24 inches E. 72 inches

50. $2 \times 5 + 3 \times 4 + 1 =$ _____

A. 53 B. 15 C. 23 D. 18 E. 13

2021 – 2022 TMSCA Elementary School (1st – 3rd) Invitational Mathematics Test Answer Key

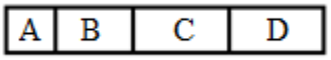
1. C
2. A
3. B
4. E
5. E
6. B
7. A
8. C
9. D
10. C
11. D
12. E
13. B
14. A
15. A
16. B
17. C
18. E
19. D
20. E
21. C
22. B
23. C
24. E
25. A
26. D
27. B
28. C
29. E
30. D
31. A
32. C
33. A
34. D
35. A
36. B
37. B
38. C
39. A
40. A
41. A
42. E
43. D
44. B
45. E
46. C
47. A
48. D
49. B
50. C

2021 – 2022 TMSCA Elementary School (1^{st} – 3^{rd}) Invitational Mathematics Test Selected Answers

5. A polygon with 6 sides is called a hexagon.

24. The sequence 44, 40, 36, 32, … has the pattern of subtracting 4 from one number to get the following number. Therefore, 32 – 4 = 28. 28 is the next number in the sequence.

25. First, label the drawing as shown.



Using the labels, the rectangles with 1 letter are A, B, C, and D. The rectangles using 2 letters are AB, BC, and CD. The rectangles using 3 letters are ABC and BCD. There is 1 rectangle using all four letters, ABCD. Therefore, there are A, B, C, D, AB, BC, CD, ABC, BCD, and ABCD rectangles, which is equal to 10 rectangles.

29. If 1 nickel = 5 cents, then 2 nickels = 10 cents, 3 nickels = 15 cents, 4 nickels = 20 cents, 5 nickels = 25 cents, 6 nickels = 30 cents, and 7 nickels = 35 cents.

30. 26 > 22 is the true statement, because > is the symbol that represents greater than.

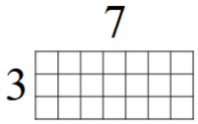
31. 1 year = 12 months.

35. Luke has a total of 3 + 2 = 5 packs of cards. If each pack of cards contains 4 cards, then Luke has a total of $5 \times 4 = 20$ cards.

40. 11 + 29 = 40 and 8 + 30 = 38. 40 is greater than 38. The inequality symbol that represents greater than is >. Therefore, the > symbol should go in the circle to make the statement true.

42. 29 minutes + 44 minutes + 37 minutes = 110 minutes. Because there are 60 minutes in 1 hour, 110 – 60 = 50. Therefore, 29 minutes + 44 minutes + 37 minutes = 1 hour 50 minutes.

43. If each square is 1 square inch, then each side of each square is 1 inch. This can mean the side lengths of large rectangle are 3 inches and 7 inches. The area of the large rectangle is then $3 \times 7 = 21$ square inches.



44. 9 is half of 18, so the fraction representing 9 out of 18 is ½.

49 The perimeter of a shape is the sum of the lengths of the sides of the shape. If a square has 4 sides measuring 12 inches, then the perimeter of the square is 12 + 12 + 12 + 12 = 48 inches.