Elementary Math Study Guide Cycle 1

Correct answers are in bold

Place Value

1. What is 7,000 + 500 + 50 + 9 in standard form

   A. 7,559 B. 7,5509 C. 7,505 D. 7,50059

2. How do you write this number using digits?
   Three hundred sixty-seven
   A. 367 B. 376 C. 30067 D. 673

3. How do you write this number using digits?
   Seventy thousand eight hundred fifty
   A. 70,850 B. 70,580 C. 7,580 D. 78,850

Comparing and Rounding

4. Which sign makes the statement true?
   77,671 ____ 71,277
   A. > B. < C. = D. ≤

5. Put these numbers in order from greatest to least.
   A. 6,913; 6,853; 6,033
   B. 6,853; 6,913; 6,033
   C. 6,853; 6,033; 6,913
   D. 6,913; 6,033; 6,853

6. Put these numbers in order from least to greatest.
   A. 2,167; 2,467; 2,667
   B. 2,167; 2,667; 2,467
   C. 2,467; 2,667; 2,167
   D. 2,167; 2,667; 2,467

Addition and Subtraction

7. The sum of two numbers is 18. The difference of the two numbers is 6. What are the two numbers?
   A. 12 and 6 B. 11 and 7 C. 10 and 8 D. 9 and 3

8. Estimate the sum by rounding each number to the nearest thousand and then adding.
   6,562 + 5,136
   A. 12,000 B. 11,000 C. 13,000 D. 10,000

Multiplication

9. What is 5 times as much as 4.
   A. 20 B. 9 C. 15 D. 25

10. Estimate the product. Round the first factor to the nearest ten, and then multiply.
    92 x 9
    A. 810 B. 720 C. 900 D. 830

11. Multiply.
    5 x 13
    A. 65 B. 60 C. 55 D. 75

More Multiplication

12. Multiply.
    84 x 10
    A. 840 B. 800 C. 8400 D. 804

13. The product of two numbers is 24. The sum of the two numbers is 11. What are the two numbers?

    A. 8 and 3 B. 6 and 4 C. 12 and 2 D. 9 and 2

Factors and Multiples

14. Find all the factor for 50.
    A. 1, 2, 5, 10, 25, 50 B. 1, 2, 25, 50 C. 5, 10, 25, D. 1, 2, 5, 10, 50

15. What number is prime.

    A. 2 B. 9 C. 12 D. 15

Number patterns

16. What is the next number in the pattern (addition)?
    1, 3, 6, 10, 15
    A. 21 B. 18 C. 20 D. 25

17. What number is missing in the pattern (multiply)?
    1, ____, 4, 8, 16, 32
    A. 2 B. 3 C. 6 D. 12

18. What number is missing in the pattern (multiply)?
    1, 3, 9, ____, 81, 243
    A. 27 B. 18 C. 24 D. 36

Number and Shape Patterns

19. What is the rule when 10 becomes 5, 8 becomes 4 and 6 becomes 3?

    A. divide by 2 B. multiply by 2 C. add by 2 D. subtract by 2

20. What is the rule when 10 becomes 16, 12 becomes 18 and 13 becomes 19?

    A. add by 6 B. add by 4 C. multiply by 2 D. subtract by 6

21. What is the rule when 16 becomes 9, 18 becomes 11 and 20 becomes 13?

    A. subtract by 7 B. add by 7 C. divide by 2 D. subtract by 5

Divide by 1-digit numbers

22. Divide 32 ÷ 5 is
    A. 6 r2 B. 5 r3 C. 6 r3 D. 7 r2

23. What is the quotient for 38 ÷ 2?
    A. 19 B. 17 C. 15 D. 18

Division Word Problems

24. An art teacher wants to buy 11 erasers. If the erasers come in packages of 9, how many packages of erasers should the teacher buy?
    A. 2 B. 1 C. 1.5 D. 3

25. A town picnic committee has $203 to buy watermelons. If each watermelon costs $7, how many watermelons can the committee buy?
    A. 29 B. 28 C. 31 D. 30

26. Tasty Treats Bakery sold 72 doughnuts today. That is 6 times as many croissants as the bakery sold. How many croissants did Tasty Treats Bakery sell?
    A. 12 B. 10 C. 15 D. 18

Mixed Operations

27. Solve. 914 ÷ 2 is
    A. 457 B. 547 C. 465 D. 476

28. Solve. 952 -729 =
    A. 223 B. 213 C. 233 D. 203

29. Solve. 479 + 54 =
    A. 533 B. 523 C. 543 D. 534

Perimeter and Area

30. The perimeter is 17. What is the measurement of the missing side?
    17 = 3 + 4 + 4 + x
    A. 6 B. 5 C. 7 D. 3

31. If a rectangle has a width of 2 and length of 5, what is the area of the rectangle?
    A. 10 B. 7 C. 3 D. 12

Equivalent Fractions

32. Which fraction is equivalent to 1/6?
    A. 2/12 B. 1/4 C. 1/5 D. 2/5

33. Which fraction is equivalent to 3/4?
    A. 9/12 B. 8/10 C. 1/2 D. 3/3

34. Which fraction is equivalent to 8/10?
    A. 4/5 B. 10/12 C. 4/6 D. 3/5

Compare Fractions

35. Which sign makes the statement true?
    7 5/12 ____ 7 1/2
    A. < B. = C. > D. ≠

36. Which sign makes the statement true?
    5 6/8 ____ 5 6/10
    A. > B. < C. = D. ≠

Add and Subtract Fractions

37. Add or subtract the fractions.
    3/6 + 1/6 =
    A. 4/6 B. 4/12 C. 2/6 D. 2/12

38. Add or subtract the fractions.
    6/8 - 4/8 =
    A. 2/8 B. 10/8 C. 10/16 D. 2/16

39. Add or subtract the fractions.
    6/8 - 1/8 =
    A. 5/8 B. 7/8 C. 5/16 D. 7/16

Add and Subtract Mixed Numbers

40. Add or subtract the fractions.
    9 1/3 + 6 1/3 =
    A. 15 2/3 B. 15 2/6 C. 15 1/6 D. 15 2/9

41. Add or subtract the fractions.
    13 3/4 – 4 1/4
    A. 9 2/4 B. 10 C. 17 2/4 D. 10 2/4

42. Add or subtract the fractions.
    8 10/12 – 5/12
    A. 8 5/12 B. 7 5/12 C. 9 15/12 D. 8 5/24

Data and Measurement

43. The Armstrong Senior Care Center kept track of how often its residents got to visit with relatives last year. Tell how many residents visited with relatives more than 3 times if the line plot has seven “x’s” on 0; eight “x’s” on1; two “x’s” on 2; six “x’s” on 3 and one “x” on 4.

    A. 1 B. 6 C. 7 D. 14

44. A chef kept track of the number of bananas people ate last week in his cafeteria. Tell how many people are there in all if the line plot has three “x’s” on 0; seven “x’s” on1; two “x’s” on 2; nine “x’s” on 3 and one “x” on 4.

    A. 22 B. 19 C. 20 D. 24

45. Jacob figured out the scores at the end of a card game. Tell which score did the fewest people receive? If the line plot has seven “x’s” on 4; nine “x’s” on 5; two “x’s” on 6; five “x’s” on 7 and one “x” on 8; four “x’s: on 9 and eight “x’s” on 10

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

Multiply Fractions and Mixed Numbers

46. What is 4 x 3 1/3?

    A. 13 1/3 B. 12 1/3 C. 14 D. 10

47. What is 4 x 5 3/4?

A. 23 B. 21 C. 24 D. 19

Multiply Fractions

48. What is 3 x 5/8?

A. 1 7/8 B. 2 2/8 C. 3 1/4 D. 2

49. What is 10 x 3/4?

A. 7 1/2 B. 7 1/4 C. 8 1/2 D. 6 3/4

Measurement: Metric

50. How many milligrams = 1 gram?

A. 1,000 B. 100 C. 10 D. 100,000

51. How many grams in 1 kilogram?

A. 1,000 B. 100 C. 10 D. 10,000

52. How many milliliters in 3 liters?

A. 3,000 B. 30 C. 300 D. 300,000

Measurement: Customary

53. Solve. 4 pt + 4 pt 1c =

A. 8 pt 1c B. 7 pt 15 c C. 9 pt 1 c D. 8 pt 2 c

54. Solve. 6 T 627 lb – 2 T 17 lb =

A. 4 T 610 lb B. 4 T 617 lb C. 3 T 610 lb D. 5 T 610 lb

Fractions and Decimals

55. In 931.5, what place value is the 1?

A. ones B. tens C. tenths D. hundredths

56. In 7,935.21, what place value is the 9?

A. hundreds B. ones C. tenths D. hundredths

Decimals and Money

57. Put the following numbers in order from least to greatest.

A. 6.1, 6.3, 6.7, 6.8, 7.1
B. 7.1, 6.8, 6.7, 6.3, 6.1
C. 7.1, 6.8, 6.3, 6.7, 6.1
D. 6.1, 6.7, 6.3, 6.8, 7.1

58. Put the following numbers in order from greatest to least.

A. 9.48, 8.76, 8.68, 8.42, 8.22
B. 9.48, 8.68, 8.76, 8.42, 8.22
C. 8.22, 8.42, 8.68, 8.76, 9.48
D. 8.22, 8.42, 8.76, 8.68, 9.48

Add and Subtract Decimals

59. Solve. .37+ .25 =

A. .62 B. .52 C. .72 D. .60

60. Solve. 716.69 – 566.08 =

A. 150.61 B. 160.61 C. 150.51 D. 140.61

Lines and Angles

61. An angle that measures 120° is called what?

A. obtuse angle B. acute angle C. right angle D. straight angle

62. An angle that measures 180° is called what?

A. straight angle B. acute angle C. obtuse angle D. right angle

Angles and Polygons

63. There are two adjacent angles. The first measures 30°. The second measures 40°. Combined they both measure m°. What is does angle m measure?

A. 70° B. 10° C. 20° D. 60°

64. There are two adjacent angles. The first measures 50°. The second measures u°. Combined they both measure 80°. What is does angle u measure?

A. 30° B. 130° C. 20° D. 60°

Triangles and Quadrilaterals

65. If a triangle has angles that measure 7 cm, 9 cm, and 7 cm, what type of triangle is it?

A. isosceles, but equilateral B. scalene, but equilateral C. equilateral D. scalene

66. If a triangle has angles that measure 10 cm, 10 cm, and 10 cm, what type of triangle is it?

A. equilateral B. scalene, but equilateral C. isosceles, but equilateral D. scalene

67. **If Mario collects 248 coins in World 1 and 376 coins in World 2 of Super Mario Bros, how many coins does he have in total?**
    a) 524
    b) 614
    c) 624
    d) 634
    Answer: c) 624

68. **Emma's chore chart shows she earns $2 for washing dishes, $3 for vacuuming, and $1.50 for taking out the trash. If she does all three chores twice a week, how much money does she earn in 4 weeks?**
    a) $52
    b) $65
    c) $78
    d) $91
    Answer: a) $52

69. **A basketball team scores 28 points in the first quarter, 32 in the second, 19 in the third, and 25 in the fourth. What was their total score?**
    a) 94
    b) 104
    c) 114
    d) 124
    Answer: b) 104

70. **In Among Us, there are 10 players. If 3 are impostors, what fraction of the players are crewmates?**
    a) 3/10
    b) 7/10
    c) 1/3
    d) 2/3
    Answer: b) 7/10
71. **Jake mows lawns for $15 per yard. If he mows 8 yards in a month, how much money does he earn?**
    a) $100
    b) $110
    c) $120
    d) $130
    Answer: c) $120

72. **A recipe for cookies requires 2 3/4 cups of flour. If you want to make 3 batches, how many cups of flour do you need?**
    a) 6 1/4
    b) 7 1/4
    c) 8 1/4
    d) 9 1/4
    Answer: c) 8 ¼

73. **If a chore wheel has 8 equal sections, what fraction of the wheel does each chore represent?**
    a) 1/4
    b) 1/6
    c) 1/8
    d) 1/10
    Answer: c) 1/8

74. **A jump rope is 2.5 meters long. How many centimeters is it?**
    a) 225 cm
    b) 250 cm
    c) 275 cm
    d) 300 cm
    Answer: b) 250 cm

75. **A family watches a 2-hour movie. If the movie starts at 7:15 PM, what time does it end?**
    a) 9:00 PM
    b) 9:15 PM
    c) 9:30 PM
    d) 9:45 PM
    Answer: b) 9:15 PM

76. **A family orders a large pizza for $18.50, drinks for $6.75, and breadsticks for $4.25. If they give the delivery person a $35 bill, how much change should they receive?**
    a) $4.50
    b) $5.00
    c) $5.50
    d) $6.00
    Answer: b) $5.50

77. **A child saves $3.50 each week for 12 weeks. How much money will they have saved?**
    a) $36
    b) $38
    c) $40
    d) $42
    Answer: c) $42

78. **A recipe calls for 3/4 cup of sugar. If you want to make 5 times the recipe, how many cups of sugar do you need?**
    a) 3 cups
    b) 3 3/4 cups
    c) 4 1/4 cups
    d) 4 3/4 cups
    Answer: b) 3 3/4 cups

79. **In a game of basketball, Team A scores 28, 22, 19, and 31 points in four quarters. What's their total score?**
    a) 90
    b) 95
    c) 100
    d) 105
    Answer: c) 100

80. **In a 5K race, the halfway point is marked. How many meters is this from the starting line?**
    a) 2,000 m
    b) 2,250 m
    c) 2,500 m
    d) 2,750 m
    Answer: c) 2,500 m

81. **A child's allowance is $10 per week. If they save 30% each week, how much will they save in 8 weeks?**
    a) $20
    b) $22
    c) $24
    d) $26
    Answer: c) $24

82. **If a child reads 25 pages of a book in 40 minutes, how many pages can they read in 2 hours at the same rate?**
    a) 60 pages
    b) 70 pages
    c) 75 pages
    d) 80 pages
    Answer: d) 75 pages

83. **A rectangular garden is 15 feet long and 10 feet wide. If a child wants to put a fence around it, how many feet of fencing will they need?**
    a) 40 feet
    b) 45 feet
    c) 50 feet
    d) 55 feet
    Answer: c) 50 feet

84. **A recipe requires 2 3/4 cups of flour and 1 1/4 cups of sugar. How many cups of dry ingredients are needed in total?**
    a) 3 3/4
    b) 4
    c) 4 1/4
    d) 4 1/2
    Answer: c) 4

85. **In Among Us, if there are 2 impostors in a game of 10 players, what fraction of the players are crewmates?**
    a) 3/5
    b) 4/5
    c) 5/6
    d) 7/8
    Answer: b) 4/5

86. **If a pizza is cut into 12 slices and a family of 4 each eats 2 slices, what fraction of the pizza is left?**
    a) 1/3
    b) 1/4
    c) 1/6
    d) 1/8
    Answer: a) 1/3

87. **A child's piggy bank contains 15 quarters, 20 dimes, 30 nickels, and 50 pennies. What's the total value of the money?**
    a) $7.75
    b) $8.65
    c) $9.15
    d) $9.65
    Answer: a) $7.75

88. **A family orders 3 large pizzas. Each pizza is cut into 8 slices. How many total slices do they have?**
    a) 20 slices
    b) 22 slices
    c) 24 slices
    d) 26 slices
    Answer: c) 24 slices

89. **A player completes 5 levels in a video game. Each level takes 12 minutes. How many minutes does it take to complete all 5 levels?**
    a) 50 minutes
    b) 55 minutes
    c) 60 minutes
    d) 65 minutes
    Answer: c) 60 minutes

90. **A car travels 60 miles in 1 hour. How far will the car travel in 2 1/2 hours?**
    a) 120 miles
    b) 130 miles
    c) 140 miles
    d) 150 miles
    Answer: d) 150 miles

91. **A basketball player makes 3 free throws in each of 8 games. How many free throws did the player make in total?**
    a) 20
    b) 22
    c) 24
    d) 26
    Answer: c) 24

92. **A school cafeteria serves 250 meals per day. How many meals are served in 5 school days?**
    a) 1,000
    b) 1,100
    c) 1,200
    d) 1,250
    Answer: a) 1,250

93. **A delivery truck drives 80 miles on Monday, 95 miles on Tuesday, and 110 miles on Wednesday. How far did the truck travel in total?**
    a) 270 miles
    b) 280 miles
    c) 285 miles
    d) 290 miles
    Answer: a) 285 miles

94. **A child's toy box has 4 shelves, each holding 12 toys. How many toys are in the toy box?**
    a) 40 toys
    b) 44 toys
    c) 48 toys
    d) 50 toys
    Answer: c) 48 toys

95. **A soccer team plays 3 games, scoring 4 goals in the first game, 2 in the second, and 5 in the third. What is the team's total number of goals?**
    a) 10 goals
    b) 11 goals
    c) 12 goals
    d) 13 goals
    Answer: b) 11 goals

96. **If a garden is 15 meters long and 10 meters wide, what is the perimeter of the garden?**
    a) 40 m
    b) 45 m
    c) 50 m
    d) 55 m
    Answer: c) 50 m

97. **A child reads 35 pages of a book each day for 7 days. How many pages will they read in total?**
    a) 240 pages
    b) 245 pages
    c) 250 pages
    d) 255 pages
    Answer: b) 245 pages

98. **If a playground has 6 swings and each swing costs $50, how much do all the swings cost together?**
    a) $200
    b) $250
    c) $300
    d) $350
    Answer: c) $300

99. **A delivery truck drives 120 miles on Monday, 150 miles on Tuesday, and 180 miles on Wednesday. What is the average number of miles driven per day?**
    a) 145 miles
    b) 150 miles
    c) 155 miles
    d) 160 miles
    Answer: c) 150 miles

100. **If a child collects 25 coins each day for 5 days, how many coins do they have in total?**
    a) 120 coins
    b) 125 coins
    c) 130 coins
    d) 135 coins
    Answer: b) 125 coins