Math 64 Practice Test #1

Appointments can be made at www.rccmathlab.com
My appointment is for: ______________ at _____:

DON'T FORGET TO BRING A PHOTO ID FOR THE TEST! No calculators allowed!

Subtract the signed numbers by adding the opposite of the second number to the first number.

1. \(48 - (-39) = \square\)

Add.

\[
\begin{array}{c}
9149 \\
+ 99 \\
\hline
9248
\end{array}
\]

2. \(9092 + 349 = \square\)

3. Baseball attendance figures for a weekend series between team A and team B were 35,402 on Friday, 41,297 on Saturday and 28,517 on Sunday.

a) What was the total attendance for the three-game series?

b) How many more fans were in attendance on Saturday than on Sunday?

Find the quotient.

4. \(\frac{36}{6} = \square\)

Select the correct choice below and fill in any answer boxes in your choice.

○ A. \(\frac{36}{6} = \square\)

○ B. The answer is undefined.

Determine whether the following number is prime, composite, or neither.

5. \(11\)

Choose the correct answer.

○ Neither

○ Composite

○ Prime

Add.

6. \(-8 + 7 = \square\)

Multiply.

7. \(555 \times 128 = \square\)

Divide.

8. \(633 \div 9 = \square \text{ R } \square\)

Here are the first ten prime numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, and 29. Using division by prime numbers, determine whether the following number is prime or composite.

9. \(253\)

Is the number 253 prime or composite?

○ Composite

○ Prime
Multiply.

10. \(-2(-6) = \square\)

Round the following number to the nearest million.

11. 69,701,248

The number rounded to the nearest million is \(\square\).

Subtract.

12. \(6,589 - 1,467 = \square\)

Rewrite the following number as a product using the power of 10 as a factor.

13. 2,900,000

Solve the equation. Check the answer to show that it is the solution.

14. \(p = 30 \cdot 3\)

\(p = \square\)

Write a legend and an equation for the following application. Solve the equation and answer the question in a complete sentence.

15. A rectangle plot of land is 5,474 square yards. If the width is 46 yards, what is the length of the rectangle? Draw a rectangle and place the known measures around it.

Choose the correct diagram from the following that shows the known values on it.

\(\square\) A. \(A = 5,474 \text{ sq yards}\) \(L\) \(46 \text{ yards}\)

\(\square\) B. \(A = 5,474 \text{ sq yards}\) \(L\) \(46 \text{ yards}\)

\(\square\) C. \(A = 5,474 \text{ sq yards}\) \(W\) \(46 \text{ yards}\)

Write the legend using L. Choose the correct answer below.

\(\square\) A. L = the width of the rectangle

\(\square\) B. L = the length of the rectangle

\(\square\) C. L = the area of the rectangle

Choose the equation from the following that represents the given situation.

\(\square\) A. \(5,474 = L \cdot 46\)

\(\square\) B. \(L \cdot 5,474 = 46\)

\(\square\) C. \(L = 5,474 \cdot 46\)

Solve the equation to complete the following statement.

The length of the rectangle is \(\square\) yards.

Simplify.

16. \(-30\) = \(\square\)

Evaluate the following expression according to the order of operations. Simply just one step one operation at a time.

17. \(24 \div (8 - 2) \cdot 2 = \square\)

Multiply.

18. \(3 \cdot 800 = \square\)
In the following identify the period and place in which the digit is found.

19. Identify the period and place in which the digit 3 is found. Then write the value that 3 represents.

\[ 7,385,621 \]

Identify the period in which the digit 3 is placed. Choose the correct answer below.

- A. hundreds
- B. Millions
- C. thousands

At which place is the digit 3 in the place-value chart? Choose the correct answer below.

- A. ones
- B. hundreds
- C. thousands

What is the value that 3 represent in the given number?

\[ \underline{\hspace{2cm}} \]

Solve.

20. \[ 33 = 16 + x \]

A square has an area of 121 square feet.

21. A) What is the length of each side of the square?

B) What is the perimeter of the square?

A) The length of each side is \[ \underline{\hspace{0.5cm}} \] feet.

B) The perimeter is \[ \underline{\hspace{0.5cm}} \] feet.

Divide.

22. \[ \frac{40}{-10} \]

The quotient is \[ \underline{\hspace{0.5cm}} \].

Find the product.

23. \[ -5 \cdot (6) \cdot (-2) = \underline{\hspace{0.5cm}} \]

Solve.

24. A motorcycle distributor needs to ship (by train) 328 new motorcycles. If each boxcar can hold 14 motorcycles, how many boxcars are needed to ship the motorcycles?

25. Change the word phrase to an algebraic expression. Use \( x \) as the variable to represent the number.

The difference between a number and 16

Let \( x \) = the number.

The difference between a number and 16 can be written as \[ \underline{\hspace{0.5cm}} \].

26. Of the first three prime numbers, 2, 3, and 5, which are factors of the following number? Use the divisibility tests for 2, 3, and 5.

Is 2 a factor of 63?

- A. Yes
- B. No

Is 3 a factor of 63?

- A. Yes
- B. No

Is 5 a factor of 63?

- A. No
- B. Yes

Find the opposite.

27. Find the opposite of 9.
Add.

28. \(-7 + 3 - (-1) = \) 

Evaluate.

29. \(34 - (5 \times 6) = \) 

Solve.

30. Shanice’s car gets 28 miles per gallon during highway driving. Approximately how far can she travel if she has 16 gallons of gas in the tank?

\( \square \) miles

Find the quotient.

31. \( \frac{45}{5} = \) 

Select the correct choice below and fill in any answer boxes in your choice.

\( \square \) A. \( \frac{45}{5} = \) 

\( \square \) B. The answer is undefined.

Multiply.

39. \( 7 \cdot 4 = \) (Simplify your answer.)

40. The attendance of a Thursday night baseball game is 31,166. The attendance on Friday is 32,722. How many more people attended Friday’s game?

The number of people is \( \square \).
41. Identify the period and place in which the digits 9 is found in the following number. Then, write the value that 9 represents. 31,967

In which period is the digit 9?
○ A Thousands
○ B Ones
○ C Tens
○ D Hundreds

In which place is the digit 9?
○ A hundreds
○ B thousands
○ C ones
○ D tens

What value does 9 represent?
○ A nine hundred
○ B nine thousand
○ C nine
○ D ninety

42. \(949 ÷ 36 = \square R \square\)

43. Determine whether the number 2765 is divisible by 2, 3 or 5.

Is 2765 divisible by 2?
○ No
○ Yes

Is 2765 divisible by 3?
○ No
○ Yes

Is 2765 divisible by 5?
○ No
○ Yes

44. \((3 + 9) ÷ 4 = \square\)

45. Subtract the signed numbers by adding the opposite of the second number to the first number.

\(53 - (-48) = \square\)

46. Multiply by 1, 2, 3, and so on, to find the first six multiples of the number 4.

The multiple are \(\square\).

Add.

47. \(-8 + 2 = \square\)

Round to the nearest thousand.

48. \(83,025 = \square\)

Solve.

49. A restaurant chain with 19 restaurants buys a new refrigerator for each store. Each refrigerator costs $399. Find the total cost of the purchase.

The total cost is $\square$.

Multiply.

50. \(444 \times 17 = \square\)

The product is \(\square\).

Find the prime factorization.

51. 245
Evaluate the following expression according to the order of operations.

52. $7 \cdot \sqrt{36} = \square$

Insert < or > between the given pair of integers to make a true statement.

53. $-14 \square 17$

Evaluate.

54. $-57 \div (-19)$

Select the correct choice below and fill in any answer boxes within your choice.

○ A. $-57 \div (-19) = \square$
○ B. The answer is undefined.

Divide and then check by multiplying.

55. $3 \overline{)69}$

\[
\square \text{ R } \square
\]

Which property does the following equation represent?

56. $7 \cdot (8 \cdot 9) = (7 \cdot 8) \cdot 9$

Choose the correct property below.

○ A. Associative property of multiplication
○ B. Communititive property of multiplication
○ C. Distributive property of multiplication

Evaluate the following expression according to the order of operations.

57. $(4 \cdot 3)^2 - 1 = \square$

Evaluate the given expression for $x=13$.

58. $6x + 5 = \square$

Solve.

59. $t = 80,365 + 51,596$

\[
t = \square
\]

Expand the notation of the following expression and find its value.

60. $25^1$

What is the expanded form of $25^1$?

$25^1 = \square$

What is the value of $25^1$?

$25^1 = \square$
1. 87
2. 18689
3. A)105216, c) 12780
4. A, 6
5. Prime
6. -1
7. 71,040
8. 70
9. Composite
10. 12
11. 70,000,000
12. 5,122
13. $29 \times 10^5$
14. 90
15. B
16. 30
17. 8
18. 2400
19. C
20. 17
21. 11
22. -4
23. 60
24. 24
25. $x - 16$
26. No
27. -9
28. -3
29. 4
30. 448
31. A, 9
32. -23
33. 5
34. 5,136
35. -10
36. -4
37. $\frac{10}{x}$
38. No
39. 28
40. 1556

Three hundred thousand
41. Ones
   Hundreds
   Nine hundred

42. 26
   13

43. No
   Yes

44. 3

45. 101

46. 4
   8
   12
   16
   20
   24

47. –6

48. 83,000

49. $7,581.00

50. 7,548

51. $5 \times 7 \times 7$

52. 42

53. <

54. A, 3

55. 23
   0
   25

56. 8

57. 143

58. 83

59. 131,961

60. 25