

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

**Answer the question.**

- 1) What does the digit 2 mean in the number 247,189? 1) \_\_\_\_\_  
A) 2 ten thousands B) 2 hundred thousands  
C) 2 hundreds D) 2 thousands

**Fill in the digits for the given place values in the following whole number.**

- 2) 5, 7 5 6, 4 8 5 2) \_\_\_\_\_  
millions \_  
thousands \_  
A) Millions 7, thousands 6 B) Millions 5, thousands 6  
C) Millions 4, thousands 8 D) Millions 5, thousands 5

**Write expanded notation.**

- 3) 34,679 3) \_\_\_\_\_  
A) 3 thousands + 4 hundreds + 6 tens + 79 ones  
B) 3 ten thousands + 4 thousands + 6 hundreds + 7 tens + 9 ones  
C) 34,679 ten thousands  
D) 9 ten thousands + 7 thousands + 6 hundreds + 4 tens + 3 ones

**Write the number in words.**

- 4) 24,807 4) \_\_\_\_\_  
A) Two million, forty-eight thousand, seven  
B) Twenty-four thousand, eight hundred seven  
C) Two hundred forty-eight thousand, seven  
D) Two thousand, four hundred eighty-seven

**Rewrite the following number using digits.**

- 5) Six hundred thirty-eight thousand, 5) \_\_\_\_\_  
nine hundred ninety-seven  
A) 638,000 B) 638,977  
C) 638,997,000 D) 638,997

**Write a word name for the number in the sentence.**

- 6) The control center was suddenly unable to track the satellite when it 6) \_\_\_\_\_  
reached a distance of 128,615 miles from the earth's surface.  
A) One hundred twenty-eight thousand, six hundred fifteen  
B) One hundred twenty-eight million, six hundred fifteen  
C) One hundred twenty thousand, eighty-six hundred, fifteen  
D) Six hundred fifteen thousand, one hundred twenty-eight

**Write standard notation for the number in the sentence.**

- 7) The distance between two stars is four trillion, three hundred seventeen 7) \_\_\_\_\_  
billion, nine hundred eighty-eight million miles.  
A) 4,317,988,000,000 B) 4,317,988  
C) 4,317,988,000 D) 4,317,988,000,000,000

**Add.**

$$\begin{array}{r} 8) \quad 65 \\ \quad 44 \\ \hline + 86 \\ \hline \end{array}$$

- A) 195                      B) 185                      C) 206                      D) 196

8) \_\_\_\_\_

**Insert parentheses to illustrate the associative law of addition.**

9)  $(5 + 3) + 4 = 5 + 3 + 4$

- A)  $(5 + 3) + 4 = 4 + (5 + 4)$                       B)  $(5 + 3) + 4 = 4 + (5 + 5)$   
 C)  $(5 + 3) + 4 = 5 + (3 + 4)$                       D)  $(5 + 3) + 4 = (5 + 3 + 4)$

9) \_\_\_\_\_

10)  $2 + (6 + 4) = 2 + 6 + 4$

- A)  $2 + (6 + 4) = ((2 + 4) + 6)$                       B)  $2 + (6 + 4) = (2 + 6) + 4$   
 C)  $2 + (6 + 4) = (2 + 6 + 4)$                       D)  $2 + (6 + 4) = (2) + 6 + 2$

10) \_\_\_\_\_

**Complete the equation to illustrate the commutative law of addition.**

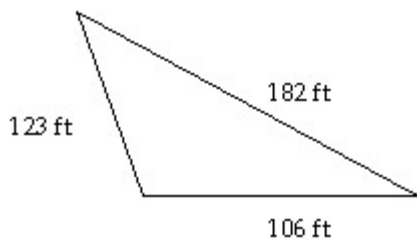
11)  $3 + 0 =$

- A)  $6 + 3$                       B)  $3$                       C)  $0 + 3$                       D)  $0$

11) \_\_\_\_\_

**Find the perimeter of (the distance around) the figure.**

12)



- A) 305 ft                      B) 401 ft                      C) 411 ft                      D) 22,386 ft

12) \_\_\_\_\_

**Write a related addition sentence.**

13)  $53 - 42 = 11$

- A)  $95 = 42 + 53$ , or  $95 = 42 + 53$                       B)  $53 = 41 + 12$ , or  $53 = 41 + 12$   
 C)  $50 = 42 + 11$ , or  $50 = 42 + 11$                       D)  $53 = 42 + 11$ , or  $53 = 11 + 42$

13) \_\_\_\_\_

**Write a subtraction sentence that corresponds to the situation.**

14) Mrs. Ito has \$ 6881 in her checking account. How much is in the account after she writes a check for \$ 846?

- A)  $\$ 7727 - \$ 846 = \$ 6881$                       B)  $\$ 6881 - \$ 846 = \$ 6035$   
 C)  $\$ 846 - \$ 6881 = \$ 6035$                       D)  $\$ 6881 - \$ 6035 = \$ 846$

14) \_\_\_\_\_

**Write two related subtraction sentences.**

15)  $8 + 77 = 85$

- A)  $86 - 9 = 77$  and  $86 - 78 = 8$                       B)  $84 - 7 = 77$  and  $84 - 76 = 8$   
 C)  $85 - 8 = 77$  and  $85 - 77 = 8$                       D)  $85 - 85 = 0$  and  $-85 + 85 = 0$

15) \_\_\_\_\_

**Write an addition sentence and a related subtraction sentence corresponding to the situation.**

**You need not carry out the subtraction.**

16) The record number of points scored in a season by the Morton High School

basketball 16)

1 team is

1065. So

far this

season

they

have

scored

629

points.

How

many

points do

they

need to

score in

the rest

of the

season to

set a new

record?

A)  $631 + \square = 1066$ ,  $\square = 1066 - (631)$

B)  $630 + \square = 1065$ ,  $\square = 1065 - 630$

C)  $629 + \square = 1067$ ,  $\square = 1067 - 629$

D)  $629 + \square = 1066$ ,  $\square = 1066 - 629$

**Subtract.**

17)  $9620 - 1965$

A) 8155

B) 7615

C) 7655

D) 7745

17) \_\_\_\_\_

18)

$$\begin{array}{r} 655 \\ - 295 \\ \hline \end{array}$$

A) 260

B) 360

C) 950

D) 350

18) \_\_\_\_\_

**Round to the nearest thousand.**

19) 97,254

A) 97,100

B) 107,000

C) 98,000

D) 97,000

19) \_\_\_\_\_

**Estimate the sum or difference by first rounding to the nearest ten.**

20)  $413$

$$\begin{array}{r} 413 \\ - 57 \\ \hline \end{array}$$

A) 360

B) 356

C) 350

D) 400

20) \_\_\_\_\_

**Estimate the sum or difference by rounding each number to the nearest hundred.**

21)  $383$

$$\begin{array}{r} 383 \\ 431 \\ 993 \\ 146 \\ + 516 \\ \hline \end{array}$$

A) 2470

B) 2400

C) 2500

D) 2469

21) \_\_\_\_\_

Use  $<$  or  $>$  for  $\square$  to write a true sentence. Draw a number line if necessary.

22)  $647 \square 635$

A)  $<$

B)  $>$

22) \_\_\_\_\_

**Multiply.**

23)  $(95)(697)$

A) 66,205

B) 66,315

C) 66,215

D) 66,225

23) \_\_\_\_\_

**Estimate the answer by rounding as indicated.**

24) James' drive from home to work is 30 miles one way. If in a month he goes to work 22 days, then how many miles does he drive going from home to work and back in one month? Estimate by rounding both numbers to the nearest ten.

A) 1750 miles

B) 1200 miles

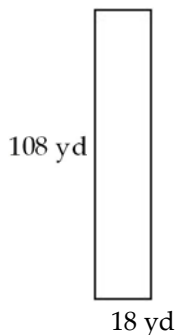
C) 1500 miles

D) 900 miles

24) \_\_\_\_\_

**Find the area of the region.**

25)



A) 1934 sq yd

B) 126 sq yd

C) 1620 sq yd

D) 1944 sq yd

25) \_\_\_\_\_

**Divide.**

26)  $33 \overline{)693}$

A) 22 R 5

B) 22 R 23

C) 21

D) 21 R 25

26) \_\_\_\_\_

**Write a related multiplication sentence.**

27)  $54 \div 27 = 2$

A)  $100 = 4 \cdot 25$ , or

$100 = 25 \cdot 4$

C)  $108 = 54 \cdot 2$ , or

$108 = 2 \cdot 54$

B)  $54 = 2 \cdot 27$ , or

$54 = 27 \cdot 2$

D)  $27 = 1 \cdot 27$ , or

$27 = 27 \cdot 1$

27) \_\_\_\_\_

**Solve.**

28)  $143 + y = 621$

A) 478

B) 764

C) 476

D) 88,803

28) \_\_\_\_\_

29)  $144 = m \cdot 8$

A) 8

B) 1152

C) 144

D) 18

29) \_\_\_\_\_

**Solve the problem.**

30) A travel agent arranged a payment plan for a client. It required a down payment of \$ 250 and 6 monthly payments of \$ 741. What was the total

30) \_\_\_\_\_

- A) \$ 4596      B) \$ 4546      C) \$ 4446      D) \$ 4696

**Write exponential notation.**

- 31)  $6 \cdot 6 \cdot 6 \cdot 6 \cdot 6$       31) \_\_\_\_\_  
A)  $6^5$       B)  $5^6$       C)  $6^0$       D)  $5 \cdot 6$

**Evaluate.**

- 32)  $7^3$       32) \_\_\_\_\_  
A) 21      B) 343      C) 216      D) 2187

**Simplify.**

- 33)  $(12 - 11)^2 + (6 + 6)^2$       33) \_\_\_\_\_  
A) 73      B) 95      C) 145      D) 169

- 34)  $7^2 - 2 \cdot 9$       34) \_\_\_\_\_  
A) 225      B) 423      C) 31      D) 315

**Find the average.**

- 35) Scores on a math test: 72 47 72 97 47      35) \_\_\_\_\_  
A) 97      B) 66      C) 47      D) 67

**Simplify.**

- 36)  $8 \times 5 + \{ 15 \div [8 - (3 + 2)] \}$       36) \_\_\_\_\_  
A) 45      B) 44      C) 47      D) 46

**Use an integer to express the number.**

- 37) The stock market lost 20 points on Monday.      37) \_\_\_\_\_  
A) -20      B) 20

**Write < or > between the pair of numbers to make the statement true.**

- 38)  $-5 \square 0$       38) \_\_\_\_\_  
A) <      B) >

**Find the absolute value.**

- 39)  $|3131|$       39) \_\_\_\_\_  
A) 1      B) 3131      C) -3131      D) 0

**Find the following.**

- 40) Find  $-x$  when  $x$  is  $-95$ .      40) \_\_\_\_\_  
A) 95      B)  $\frac{1}{95}$       C) -95      D) 0

**Evaluate  $-|-x|$  given  $x$ .**

- 41) 45      41) \_\_\_\_\_  
A) -45      B) -28      C) 28      D) 45

**Add.**

- 42)  $14 + (-23) + 11 + (-1)$       42) \_\_\_\_\_  
A) -19      B) 1      C) 49      D) -21

**Subtract.**

43)  $2 - (-6)$  43) \_\_\_\_\_  
 A) -8                      B) 4                      C) 8                      D) -4

**Simplify.**

44)  $3 + (-18) - (-7) + 6$  44) \_\_\_\_\_  
 A) -16                      B) 20                      C) -2                      D) -14

**Solve the problem.**

45) A corporation's bank account has \$8709 in it when the treasurer writes checks for \$4396, \$149, and \$405. Then deposits of \$2857 and \$2564 are made. How much is in the account? Is it overdrawn? 45) \_\_\_\_\_  
 A) -\$8238, yes                      B) \$9585, no  
 C) \$9180, no                      D) \$8238, no

**Multiply.**

46)  $(-3)(-4)(3)$  46) \_\_\_\_\_  
 A) -36                      B) 26                      C) 36                      D) 136

**Simplify.**

47)  $(-1)^{23}$  47) \_\_\_\_\_  
 A) 23                      B) -1                      C) -23                      D) 1

**Multiply.**

48)  $-1(-37)$  48) \_\_\_\_\_  
 A) -37                      B) -1                      C) 37                      D) 1

**Divide, if possible.**

49)  $\frac{102}{-6}$  49) \_\_\_\_\_  
 A)  $\frac{1}{17}$                       B) 17                      C) -17                      D) -27

**Simplify.**

50)  $2 \cdot 7 + 9(3 - 1) + 8$  50) \_\_\_\_\_  
 A) 72                      B) 104                      C) 48                      D) 40

**Simplify, if possible.**

51)  $16 - |8 - 15^2|$  51) \_\_\_\_\_  
 A) 9                      B) -217                      C) -201                      D) 233

52)  $\frac{-50 \cdot 20 \div 5^2}{5 \cdot 25 - 125}$  52) \_\_\_\_\_  
 A) 0                      B) -40  
 C) 125                      D) Undefined

**Evaluate.**

53)  $2x^3 + 5x^2 - 7$ , for  $x = -3$  53) \_\_\_\_\_  
 A) -16                      B) -76                      C) -28                      D) -26

54)  $x^5$ , for  $x = 1$  and  $x = -1$ . 54) \_\_\_\_\_

- A) 1, 1      B) -1, -1      C) 1, -1      D) 0, 0

**Combine like terms.**

55)  $17x - 9y + 14 - 11x - 9 - 3y$

- A)  $6x - 6y + 5$       B)  $-6x - 12y + 5$   
 C)  $-6x - 6y + 5$       D)  $6x - 12y + 5$

55) \_\_\_\_\_

**Use the distributive law to write an equivalent expression.**

56)  $-9(-4x - 8y + 4)$

- A)  $36x + 72 + 4$       B)  $36x - 72y - 36$   
 C)  $36x - 8y + 4$       D)  $36x + 72y - 36$

56) \_\_\_\_\_

**Combine like terms.**

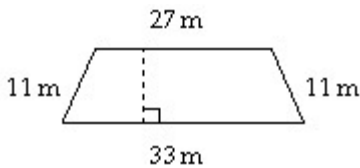
57)  $9x^7y^8 + 4x^7y^8 + 5x^7y^8 + 2x^7y^8 + 8x^7y^8$

- A)  $28x^7y^8$       B)  $10x^7y^8$   
 C)  $12x^7y^8$       D) Can't be simplified

57) \_\_\_\_\_

**Find the perimeter of the polygon.**

58)



- A) 82 m      B) 297 m      C) 33 m      D) 44 m

58) \_\_\_\_\_

**Solve the problem.**

59) A small farm field is a square measuring 210 ft on a side. What is the perimeter of the field? If you double the length of each side of the field, what is the new perimeter?

- A) 210 ft, 840 ft      B) 420 ft, 840 ft  
 C) 420 ft, 1680 ft      D) 840 ft, 1680 ft

59) \_\_\_\_\_

60) Find the perimeter of a square room with side 7 ft.

- A) 98 ft      B) 14 ft      C) 28 ft      D) 38 ft

60) \_\_\_\_\_

**Classify the pair as either equivalent expressions or equivalent equations.**

61)  $12(x - 3); 9x - 36 + 3x$

- A) Equivalent equations      B) Equivalent expressions

61) \_\_\_\_\_

**Solve using the division principle.**

62)  $-30 = 5k$

- A) 35      B) 1      C) -6      D) -35

62) \_\_\_\_\_

**Solve using the addition or division principle.**

63)  $-135 = 9z$

- A) 144      B) -15      C) 1      D) -144

63) \_\_\_\_\_

**Solve the equation.**

64)  $50 = 10x - 10$

- A) 50      B) 54      C) 6      D) 15

64) \_\_\_\_\_

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

- 52) D
- 53) A
- 54) C
- 55) D
- 56) D
- 57) A
- 58) A
- 59) D
- 60) C
- 61) B
- 62) C
- 63) B
- 64) C