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

Underline the digit that occupies the given place.

1) 775   Tens place

   A) 7<u>7</u>5   B) <u>7</u>75   C) 77<u>5</u>   D) None of these   1) _____

2) 929   Hundreds place

   A) 92<u>9</u>   B) 9<u>2</u>9   C) <u>9</u>29   D) None of these   2) _____

3) 5,975   Hundreds place

   A) 5,<u>9</u>75   B) 5,9<u>7</u>5   C) 5,97<u>5</u>   D) <u>5</u>,975   3) _____

4) 4,226   Thousands place

   A) <u>4</u>,226   B) 4,<u>2</u>26   C) 4,2<u>2</u>6   D) 4,22<u>6</u>   4) _____

5) 44,998   Hundreds place

   A) 44,<u>9</u>98   B) 4<u>4</u>,998   C) 44,9<u>9</u>8   D) 44,99<u>8</u>   5) _____

6) 178,921   Ten thousands place

   A) 1<u>7</u>8,921   B) <u>1</u>78,921   C) 17<u>8</u>,921   D) 178,9<u>2</u>1   6) _____

7) 68,487,971   Millions place

   A) 68,48<u>7</u>,971   B) 68,<u>4</u>87,971   C) 6<u>8</u>,487,971   D) 68,4<u>8</u>7,971   7) _____

8) 91,731,111   Hundred thousands place

   A) 91,<u>7</u>31,111   B) 91,7<u>3</u>1,111   C) 91,73<u>1</u>,111   D) 9<u>1</u>,731,111   8) _____

9) 174,211   Hundred thousands place

   A) 1<u>7</u>4,211   B) 17<u>4</u>,211   C) 174,2<u>1</u>1   D) <u>1</u>74,211   9) _____

10) 3,213,866   Thousands place

   A) 3,2<u>1</u>3,866   B) 3,21<u>3</u>,866   C) 3,213,<u>8</u>66   D) 3,213,8<u>6</u>6   10) _____

Identify the place occupied by the underlined digit.

11) 45,<u>6</u>31   11) _____

   A) Thousands   B) Tens   C) Hundreds   D) Ten thousands

12) 4<u>8</u>,389   12) _____

   A) Tens   B) Thousands   C) Ten thousands   D) Hundreds

1

13) 36,793   13) _____

    A) Hundreds   B) Ten thousands   C) Thousands   D) Tens

14) 647,824   14) _____

    A) Tens   B) Thousands   C) Hundreds   D) Ten thousands

15) 838,145

    A) Ten thousands   B) Hundred thousands

    C) Tens   D) Thousands

15) _____

16) 2,838, 179

    A) Thousands   B) Millions   C) Tens   D) Ten thousands

16) _____

17) 6,181,837

    A) Millions   B) Tens

    C) Thousands   D) Hundred thousands

17) _____

18) 88,568,154

    A) Millions   B) Ten millions

    C) Hundred thousands   D) Thousands

18) _____

19) 59,999,999

    A) Hundred thousands   B) Ten millions

    C) Ten thousands   D) Thousands

19) _____

20) 47,777,777

    A) Hundred thousands   B) Thousands

    C) Millions   D) Ten millions

20) _____

Insert commas as needed.

21) 566795

    A) 5,667,95   B) 566,795   C) 5667,95   D) 566795

21) _____

22) 2941735

    A) 2,941,735   B) 2,941735   C) 294,1735   D) 2941,735

22) _____

23) 48565656

    A) 485,656,56   B) 4,856,565,6   C) 485,65,656   D) 48,565,656

23) _____

24) 1969819486

    A) 1,96981,9486   B) 1969,819,486   C) 196,981,948,6   D) 1,969,819,486

24) _____

25) 1561516

    A) 1,561,516   B) 156,1516   C) 1561,516   D) 1,561516

25) _____

26) 23488432

26) _____

   A) 234,884,32   B) 23,488,432   C) 234,88,432   D) 2,348,843,2

27) 1999999911

27) _____

   A) 1999,999,911   B) 199,999,991,1   C) 1,999,999,911   D) 19,99,999,911

Write the number in words.

28) 135,060   28) _____
- A) Thirteen thousand, five hundred sixty
- B) Thirteen thousand, five hundred six
- C) One hundred thirty–five thousand, sixty
- D) One million, thirty–five thousand, sixty

29) 9,300,695   29) _____
- A) Nine million, three thousand, six hundred ninety–five
- B) Nine million, thirty thousand, six hundred ninety–five
- C) Ninety–three thousand, six hundred ninety–five
- D) Nine million, three hundred thousand, six hundred ninety–five

30) 22,000,674   30) _____
- A) Twenty–two million, six hundred seventy–four
- B) Two million, two thousand, six hundred seventy–four
- C) Twenty–two hundred million, six hundred seventy–four
- D) Twenty–two million, six thousand seventy–four

31) 64,568,009   31) _____
- A) Sixty–four million, five hundred sixty–eight thousand, nine
- B) Sixty–four million, five hundred thousand, sixty–eight hundred, nine
- C) Sixty–million, five thousand sixty–eight hundred, nine
- D) Sixty million, forty–five thousand, sixty–eight hundred and nine

32) 235,060   32) _____
- A) Two hundred thirty–five thousand, sixty
- B) Two million, thirty–five thousand, sixty
- C) Twenty–three thousand, five hundred six
- D) Twenty–three thousand, five hundred sixty

33) 4,200,091   33) _____
- A) Four million, two hundred thousand, ninety–one
- B) Four million, twenty thousand, ninety–one
- C) Forty–two thousand, ninety–one
- D) Four million, two hundred ninety–one

34) 5,168   34) _____
- A) Five hundred thousand, one hundred sixty–eight
- B) Five thousand, one hundred sixty–eight
- C) Fifty–one thousand, sixty–eight
- D) Five million, one thousand, sixty–eight

35) 3,072   35) _____
- A) Three hundred thousand, seventy–two
- B) Three million, seventy–two
- C) Three thousand, seventy–two
- D) Thirty thousand, seventy–two

36) 24,807

    A) Two hundred forty-eight thousand, seven
    B) Two thousand, four hundred eighty-seven
    C) Twenty-four thousand, eight hundred seven
    D) Two million, forty-eight thousand, seven

37) 70,146
    A) Seven million, one thousand, forty-six
    B) Seven thousand, one hundred forty-six
    C) Seventy thousand, one hundred forty-six
    D) Seven hundred one thousand, forty-six

Write the number in standard form.
38) Eight thousand, one hundred sixty-seven
    A) 810,067   B) 800,167   C) 8,167   D) 81,067

39) Thirty-two thousand, nine hundred five
    A) 3,295   B) 32,950   C) 32,905   D) 320,905

40) Seven thousand, six
    A) 7,600   B) 7,006   C) 76,000   D) 7,060

41) Forty-eight thousand, seventeen
    A) 48,170   B) 4,817   C) 48,017   D) 47,180

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

43) Two hundred six thousand, one hundred seven
    A) 260,170   B) 2,617   C) 206,107   D) 207,106

44) One hundred million, six thousand
    A) 106,000,000   B) 1,006   C) 1,600,000   D) 100,006,000

45) Ten million, three hundred fifty-four thousand, two hundred three
    A) 10,354,203   B) 1,354,230   C) 135,423   D) 1,354,203

46) Twenty-three billion, one million, fifteen hundred thousand
    A) 23,150,000,000   B) 23,000,015,000   C) 23,001,500,000   D) 23,015,000

47) Thirty-three million, one hundred five thousand, one hundred
    A) 33,105,010   B) 33,015,100   C) 33,150,001   D) 33,105, 100

Write the number in expanded form.
48) 453
    A) 4 thousands + 5 hundreds + 3 tens = 4000 + 500 + 30
    B) 3 hundreds + 5 tens + 4 ones = 300 + 50 + 4

C) 4
5
3
h

7

undreds = 453
D) 4 hundreds + 5 tens + 3 ones = 400 + 50 + 3

49) 3267

    A) 3 thousands + 2 hundreds + 6 tens + 7 ones = 3000 + 200 + 60 + 7
    B) 3267 thousands = 3267
    C) 7 thousands + 6 hundreds + 2 tens + 3 ones = 7000 + 600 + 20 + 3
    D) 3 hundreds + 6 tens + 2 ones = 300 + 60 + 2

50) 92,745

    A) 9 ten thousands + 2 thousands + 7 hundreds + 4 tens + 5 ones = 90,000 + 2000 + 700 + 40 + 5

    B) 9 thousands + 2 hundreds + 7 tens + 45 ones = 9000 + 200 + 70 + 45

    C) 5 ten thousands + 4 thousands + 7 hundreds + 2 tens + 9 ones = 50,000 + 4000 + 700 + 20 + 9

    D) 92,745 ten thousands = 92,745

50) _____

51) 60,700

    A) 670 ten thousands = 60,700

    B) 6 thousands + 7 hundreds = 6000 + 700

    C) 6 ten thousands + 7 thousands = 60,000 + 7000

    D) 6 ten thousands + 7 hundreds = 60,000 + 700

51) _____

52) 7090

    A) 7 hundreds + 9 ones = 700 + 9

    B) 7 ten thousands + 9 thousands = 70,000 + 9000

    C) 7 thousands + 9 tens = 7000 + 90

    D) 709 thousands = 709,000

52) _____

53) 30,980

    A) 3 ten thousands + 9 thousands + 8 tens = 30,000 + 9000 + 80

    B) 3 thousands + 9 tens + 8 ones = 3000 + 90 + 8

    C) 3 ten thousands + 9 hundreds + 8 tens = 30,000 + 900 + 80

    D) 3 thousands + 9 hundreds + 8 ones = 3000 + 900 + 8

53) _____

54) 3,977, 366

    A) 3 hundred thousands + 9 ten thousands + 7 thousands + 7 hundreds + 3 tens + 6 ones + 6 = 300,000 + 90,000 + 7000 + 700 + 30 + 6 + 6

    B) 3 millions + 9 hundred thousands + 7 ten thousands + 7 thousands + 3 hundreds + 6 tens + 6 ones = 3,000,000 + 900,000 + 70,000 + 7000 + 300 + 60 + 6

    C) 6 millions + 6 hundred thousands + 3 ten thousands + 7 thousands + 7 hundreds + 9 tens + 3 ones = 7,000,000 + 600,000 + 30,000 + 7000 + 700 + 90 + 3

    D) 3 millions + 9 hundred thousands + 7 ten thousands + 7 thousands + 3 tens + 6 ones + 6 = 3,000,000 + 900,000 + 70,000 + 7000 + 30 + 6 + 6

54) _____

Round to the indicated place.

55) 9199 to the nearest ten

    A) 9210   B) 9190   C) 9200   D) 9300

55) _____

56) 68,405 to the nearest ten

    A) 68,410   B) 68,510   C) 68,400   D) 68,420

56) _____

57) 7577 to the nearest hundred

    A) 7600   B) 7590   C) 7500   D) 7700

57) _____

58) 89,036 to the nearest hundred   58) _____

    A) 89,100   B) 89,010   C) 89,000   D) 88,900

59) 47,158 to the nearest thousand

    A) 48,000   B) 47,100   C) 57,000   D) 47,000

60) 716 to the nearest thousand

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

61) 685,123 to the nearest ten thousand

    A) 680,000   B) 690,000   C) 700,000   D) 685,000

62) 39,772,218 to the nearest million

    A) 40,000,000   B) 39,000,000   C) 39,772,000   D) 39,800,000

63) 268 to the nearest hundred

    A) 270   B) 200   C) 260   D) 300

64) 63,666 to the nearest ten thousand

    A) 70,000   B) 60,000   C) 63,660   D) 6

Write the number in words.

65) A company had net revenues of $7,900,235 in one year.

    A) Seven million, nine thousand, two hundred, thirty–five

    B) Seven million, nine hundred thousand, two hundred, thirty–five

    C) Seven million, ninety thousand, two hundred, thirty–five

    D) Seven million, nine hundred thousand, two thousand, thirty–five

66) While working as a stockbroker, Francois sold securities worth $6,400,900 last year.

    A) Six million, four thousand, nine dollars

    B) Six million, four hundred thousand, nine dollars

    C) Six million, four hundred thousand, nine hundred dollars

    D) Six million, four thousand, nine hundred dollars

67) A country has an area of approximately 3,400,700 square miles.

    A) Three million, four thousand, seven hundred

    B) Three million, four thousand, seven

    C) Three million, four hundred thousand, seven hundred

    D) Three million, four hundred thousand, seven

68) A recent census confirmed that the population of a major city is 6,500,006.

    A) Six million, five hundred thousand, six   B) Six million, five thousand, six

    C) Six million, five thousand, six hundred   D) Six million, five hundred thousand, sixty

69) A large cooperation earned approximately $1,400,000,000.

A) One billion, four million dollars

B) One million, four thousand dollars

C) One billion, four hundred million dollars

D) One billion, four hundred thousand dollars

70) An expensive telescope has found evidence that the universe contains about 124,900,000,000
 galaxies.
   A) One hundred twenty-four million, nine thousand
   B) One hundred twenty-four billion, nine million dollars
   C) One hundred twenty-four billion, nine hundred thousand
   D) One hundred twenty-four billion, nine hundred million

71) A mutual fund purchased a large block of stock valued at $4,700,900.
   A) Four million, seven hundred thousand, nine hundred
   B) Four million, seven thousand, nine hundred
   C) Four million, seven hundred thousand, nine
   D) Four million, seven thousand, nine

72) A planet orbits its sun at a distance of about 92,967,000 miles.
   A) Ninety-two million, nine hundred sixty-seven miles
   B) Ninety-two million, nine hundred sixty-seven thousand miles
   C) Ninety-two billion, nine hundred sixty-seven million miles
   D) Ninety-two billion, nine hundred sixty-seven thousand miles

Write the number in standard form.

73) The Johnsons have driven their car forty-two thousand, eight hundred five miles in the last few
 years.
   A) 42,805   B) 420,805   C) 42,850   D) 4,285

74) A certain exotic sportscar costs three hundred twelve thousand, four hundred ninety-one dollars.
   A) 3,204,910   B) 312,491,000   C) 31,241   D) 312,491

75) While traveling on business, Jerel flew sixty-nine thousand, seven hundred eight miles.
   A) 69,0708   B) 69,708   C) 609,0708   D) 609,7008

76) When the stock market went down, Ellen lost one million, two thousand, seventy-six dollars.
   A) $1,002,076   B) $1,200,760   C) $1,020,076   D) $1,200,076

77) Last week Tom purchased a used car that had been driven eighty-one thousand, two hundred
 fifty-one miles.
   A) 18, 251   B) 810,251   C) 81,521   D) 81,251

78) An ocean covers approximately three million, five hundred sixty-eight thousand, seven hundred
 square miles.
   A) 3,568,007   B) 3,568, 070   C) 3,568,700   D) 3,000,568,700

79) The world-wide production of cereal grains has reached about one billion, nine hundred sixty-two

four hundred six thousand, two hundred tons.

    A) 1,962,460,200   B) 1,962,406,200   C) 1,962,406,020   D) 1,962,6046,200

80) A major league baseball team is expecting attendance of one hundred fifty–two thousand, six hundred nine for a four game series.

    A) 152,690   B) 152,609   C) 152,069   D) 512,609

Round to the indicated place.

81) Chuck Yeager, who made the first supersonic flight, flew a North American Aircraft X–15 rocket plane to an altitude of 314,950 feet. Round to the nearest thousand feet.

    A) 314,900 feet   B) 315,000 feet   C) 310,000 feet   D) 314,000 feet

81) _____

82) In 1984, J. W. Kettinger Jr. became the first person to fly a helium balloon solo across the Atlantic Ocean. He flew 3,543 miles. Round to the nearest hundred miles.

    A) 3,640 miles   B) 3,600 miles   C) 3,540 miles   D) 3,500 miles

82) _____

83) Winds have reached 319 miles per hour during a series of violent tornadoes that hit Oklahoma City. Round to the nearest ten miles per hour.

    A) 319 miles per hour   B) 300 miles per hour
    C) 330 miles per hour   D) 320 miles per hour

83) _____

84) When lava erupts from a volcano, it could reach a temperature of 2,412° F. Round to the nearest thousand degrees.

    A) 2,400° F   B) 3,400° F   C) 2,000° F   D) 3,000° F

84) _____

85) Mauna Loa, in Hawaii, is the largest volcano in the world. Its height above sea level is 13,577 feet. Round to the nearest thousand feet.

    A) 14,500 feet   B) 13,000 feet   C) 14,000 feet   D) 13,500 feet

85) _____

86) Florida, the Sunshine State, has an area of about 59,644 square miles. Round to the nearest ten thousand square miles.

    A) 60,000 square miles   B) 59,000 square miles
    C) 510,000 square miles   D) 58,000 square miles

86) _____

87) The Missouri River is the second longest river in the United States. The Missouri River flows for about 2,317 miles. Round to the nearest ten miles.

    A) 3,300 miles   B) 2,320 miles   C) 2,317 miles   D) 2,310 miles

87) _____

88) The moon is the nearest neighbor to the earth. The circumference of the moon is about 6,690 miles. Round to the nearest thousand miles.

    A) 6,700 miles   B) 7,000 miles   C) 6,000 miles   D) 6,600 miles

88) _____

Add.

```
  9939
+ 2408
```

89)

    A) 11,347   B) 11,337   C) 11,247   D) 12,347

89) _____

4107

9

0) $+ 120$

A) 4227   B) 5307   C) 4127   D) 4217

90) _____

90,325
91) + 231   91) _____

    A) 92,635   B) 90,456   C) 90,556   D) 90,566

50,769
92) + 4627   92) _____

    A) 55,396   B) 54,396   C) 55,596   D) 97,039

32,871
93) + 79,551   93) _____

    A) 112,422   B) 111,322   C) 111,422   D) 122,422

11,858
94) + 64,450   94) _____

    A) 76,298   B) 76,308   C) 656,358   D) 96,408

95) 31,131 + 23,253   95) _____
    A) 63,384   B) 54,384   C) 54,654   D) 54,656

96) 837 + 30,336   96) _____
    A) 30,173   B) 38,706   C) 32,603   D) 31,173

97) 1327 + 5944   97) _____
    A) 7171   B) 7261   C) 7271   D) 6271

98) 71,068 + 83,516   98) _____
    A) 164,584   B) 144,584   C) 149,585   D) 154,584

99) 2848 + 326 + 4   99) _____
    A) 3163   B) 3178   C) 3188   D) 3278

100) 32,950 + 88,771 + 4638   100) _____
    A) 124,354   B) 125,359   C) 161,359   D) 126,359

101) 578 + 50 + 3928 + 7   101) _____
    A) 4563   B) 4363   C) 4543   D) 4583

102) 8783 + 747 + 2 + 27   102) _____
    A) 8999   B) 9359   C) 9659   D) 9559

103) 89,591 + 58 + 1166 + 36,481   103) _____
    A) 137,296   B) 127,296   C) 127,196   D) 128,296

8030
3778
104) + 5683   104) _____

    A) 16,491   B) 17,491   C) 17,281   D) 17,470

38,263
8573
105) + 27,352   105) _____

    A) 73,188   B) 74,288   C) 74,188   D) 75,288

106) 900 + 20 + 1000   106) _____
    A) 1920   B) 1910   C) 1930   D) 1820

107) 30,000 + 200 + 60   107) _____
    A) 31,260   B) 29,260   C) 30,160   D) 30,260

108) 3855 meters + 7945 meters   108) _____
    A) 11,700 meters   B) 11,745 meters   C) 11,800 meters   D) 11,810 meters

109) 43 miles + 58 miles   109) _____
    A) 91 miles   B) 111 miles   C) 201 miles   D) 101 miles

110) 149 kilometers + 366 kilometers   110) _____
    A) 615 kilometers   B) 515 kilometers   C) 525 kilometers   D) 505 kilometers

111) 1550 square miles + 3907 square miles   111) _____
    A) 5457 square miles   B) 6457 square miles
    C) 5557 square miles   D) 5357 square miles

112) 54 hours + 26 hours + 91 hours   112) _____
    A) 181 hours   B) 161 hours   C) 271 hours   D) 171 hours

113) 2200 square meters + 100 square meters + 33 square meters   113) _____
    A) 363 square meters   B) 353 square meters
    C) 2333 square meters   D) 2243 square meters

114) $7700 + $666 + $33   114) _____
    A) $776   B) $1469   C) $8399   D) $8499

Use estimation to determine which calculation is incorrect.

115)   115) _____

A)	B)	C)	D)
8956	241	8956	241
539	3667	4823	539
+ 4956	+ 8956	+ 334	+ 4823
14,351	12,864	14,113	5603

116)

A)
```
  8543
   733
+ 4344
13,620
```

B)
```
   220
  2303
+ 8543
11,066
```

C)
```
   495
  2303
+ 4344
  6234
```

D)
```
   220
   733
+ 3426
  4379
```

116) _____

117)

A)
```
   463
  2810
+ 3983
  7256
```

B)
```
  7647
   257
+ 4335
12,239
```

C)
```
   827
   257
+ 3983
  4957
```

D)
```
   827
  2810
+ 7647
11,284
```

117) _____

118)

A)
```
  8180
41,805
+ 3893
53,878
```

B)
```
54,243
  3116
+ 3893
61,252
```

C)
```
38,709
  3116
+ 8180
50,005
```

D)
```
38,709
41,805
+ 3540
83,044
```

118) _____

119)

A)
```
2,483,625
     3671
   + 3960
5,729,535
```

B)
```
    35,970
    40,994
+ 3,342,239
 3,419,203
```

C)
```
7,559,648
   40,994
   + 3960
7,604,602
```

D)
```
    35,970
      3671
+ 7,559,648
 7,599,289
```

119) _____

120)

A)
```
 79,677
− 57,269
 22,408
```

B)
```
 88,560
− 63,342
152,232
```

C)
```
 60,471
− 36,640
 23,831
```

D)
```
 67,700
− 32,873
 34,827
```

120) _____

121)

A)
```
 683,217
− 367,259
 315,958
```

B)
```
 699,160
− 424,188
 274,972
```

C)
```
 777,475
− 601,597
 175,878
```

D)
```
 759,018
− 550,409
 219,609
```

121) _____

122)

A)
```
 5,023,568
− 2,461,184
 2,562,384
```

B)
```
 948,235
− 599,547
 349,698
```

C)
```
 2,744,893
− 1,385,501
 1,359,392
```

D)
```
 64,189
− 32,340
 31,849
```

122) _____

20

123)

A)
   805,670
 − 501,439
   304,231

B)
  54,300,106
 − 8,410,182
  45,889,924

C)
   508,500
 − 349,653
   158,737

D)
  16,898,700
 − 10,001,782
   6,896,918

124)

A)
  44,645,905
 − 19,371,128
  25,274,777

B)
  1,975,994
 − 915,173
  1,060,821

C)
  60,478
 − 30,939
  29,539

D)
  775,738
 − 515,824
  260,024

Subtract.

125)
   866
− 31

A) 835   B) 897   C) 735   D) 833

126)
   9556
− 242

A) 9314   B) 9310   C) 314   D) 9230

127)
   8668
− 3525

A) 8143   B) 5143   C) 5093   D) 5133

128)
   5718
− 3592

A) 2126   B) 2122   C) 5126   D) 2102

129)
   5269
− 3951

A) 1216   B) 1318   C) 1316   D) 4318

130)
   85,448
− 58,955

A) 26,493   B) 26,403   C) 26,483   D) 34,493

131)
   53,245
− 8688

A) 44,467   B) 44,557   C) 52,557   D) 44,547

927,189
132) – 431,337

132) _____

A) 495,752 B) 495,952 C) 495,852 D) 495,842

133) 87 – 38

133) _____

A) 59 B) 69 C) 44 D) 49

134) 769 – 336

134) _____

A) 533 B) 417 C) 443 D) 433

135) 691 – 21

135) _____

A) 682 B) 670 C) 770 D) 660

136) 5717 – 3281

136) _____

A) 2436 B) 2936 C) 2526 D) 2396

137) 23,603 – 16,422

137) _____

A) 7181 B) 7081 C) 7581 D) 8581

138) 43,828 – 7701

138) _____

A) 35,827 B) 40,127 C) 43,947 D) 36,127

139) 88,272 – 5199

139) _____

A) 90,893 B) 83,373 C) 83,073 D) 87,073

140) 6639 – 869

140) _____

A) 5670 B) 5769 C) 5780 D) 5770

141) 76 miles – 22 miles

141) _____

A) 74 miles B) 64 miles C) 49 miles D) 54 miles

142) 660 miles – 256 miles

142) _____

A) 404 miles B) 504 miles C) 388 miles D) 414 miles

143) 556 feet – 32 feet

143) _____

A) 624 feet B) 536 feet C) 524 feet D) 514 feet

144) 8471 meters – 1058 meters

144) _____

A) 7913 meters B) 7413 meters C) 7503 meters D) 7373 meters

22

145) 55,312 meters – 11,707 meters   145) _____

    A) 44,005 meters   B) 43,605 meters   C) 43,505 meters   D) 45,005 meters

146) 85,640 kilometers – 8281 kilometers   146) _____

    A) 77,059 kilometers   B) 77,359 kilometers

    C) 85,179 kilometers   D) 81,359 kilometers

147) 54,578 hours − 7740 hours

    A) 47,138 hours   B) 50,838 hours   C) 54,658 hours   D) 46,838 hours

148) $6755 − $981

    A) $5773   B) $5774   C) $5784   D) $5674

Solve.

149) Sue had $815 in her bank account. She deposited a $453 pay check and a $242 pay check. How much did she deposit and what was her new balance?

    A) $695; $1510   B) $695; $1500   C) $1268; $1510   D) $1057; $1410

150) In the metropolitan area, car dealers have 8103 foreign sports cars for sale and 6902 domestic sports cars for sale. How many sports cars are for sale?

    A) 1201 cars   B) 14,507 cars   C) 15,005 cars   D) 2120 cars

151) In a biology experiment, a scientist collected 9767 mosquitoes in a field and 7923 mosquitoes in an urban area. How many mosquitoes did she collect altogether?

    A) 17,690 mosquitoes   B) 2881 mosquitoes

    C) 17,343 mosquitoes   D) 1844 mosquitoes

152) Find the perimeter.
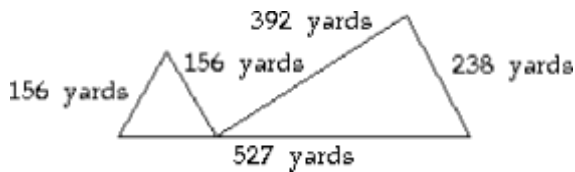
    A) 1,231 yards   B) 1,313 yards   C) 1,625 yards   D) 1,469 yards

153) Last year the hatch−back model of a new car cost $15,771. This year's model costs $17,774. How much more does this year's model cost?

    A) $33,545   B) $2003   C) $32,545   D) $1903

154) A survey of 1960 people found that 756 people were planning to travel on Labor Day weekend. How many people were planning to stay home?

    A) 1104 people   B) 2616 people   C) 1204 people   D) 2716 people

155) There are 1708 students registered at Lincoln Community College. 397 of them are boys. How many girls are registered?

    A) 1301 girls   B) 2005 girls   C) 1311 girls   D) 2105 girls

156) While working for a major league baseball team, one of your jobs was to keep a record of the paid attendance for the first five games of the season. After the first seven games you gave this chart to

your
super

24

visor. What was the total attendance for the first five games?

Games	1	2	3	4	5
Attendance	31,423	33,634	31,836	33,108	33,276

A) 163,277   B) 163,166   C) 163,388   D) 164,278

157) At this moment you have $809 in your checking account. Tomorrow you plan to deposit $203, and two days later you are planning to write a check for $778. Will you have enough money to write the check?

    A) Yes   B) No

157) _____

158) The monthly plan for your cellular telephone allows you to use 200 minutes a month. After calling customer service you find that you have used 49 minutes. You are planning to make two short personal calls of about 7 minutes each. Then, you need to make three important long business calls. If the calls are of equal length, approximately how much time will you have for each call? Round to the nearest whole number.

    A) 44 minutes   B) 48 minutes   C) 34 minutes   D) 46 minutes

158) _____

159) During the last four months of a recent year, Annie's Natural Food Store reported the following sales.

    September $3492
    October $2476
    November $3478
    December $2702

What were the total sales over this period?

    A) $12,158   B) $12,258   C) $12,248   D) $12,148

159) _____

160) During the last four months of a recent year, Annie's Natural Food Store reported the following sales.

    September $3362
    October $2696
    November $3492
    December $4144

How much more were the sales in December than the sales in November?

    A) $7636   B) $652   C) $552   D) $7536

160) _____

161) Pete is driving across country from Boston to Seattle. He keeps a record of the distance that he drives each day.

    Monday   415 miles
    Tuesday   302 miles
    Wednesday 315 miles
    Thursday   279 miles
    Friday   264 miles

How much further did he drive on Monday than on Friday?

    A) 415 miles   B) 151 miles   C) 136 miles   D) 679 miles

161) _____

162) Pete is driving across country from Boston to Seattle. He keeps a record of the distance that he drives each day.

    Monday   444 miles
    Tuesday   303 miles
    Wednesday 263 miles
    Thursday   293 miles
    Friday   301 miles

What was his total mileage for the first three days of the

week?
   A) 1010 miles   B) 1000 miles   C) 1110 miles   D) 1604 miles

163) The height of the tallest building in the town of Chorlton is 1317 feet. It is 147 feet taller than the second tallest building. What is the height of the second tallest building in Chorlton?

    A) 1170 feet   B) 1464 feet   C) 1463 feet   D) 1169 feet

163) _____

164) The balance in your checking account is $884. You write checks for $38, $55, and $119. You then deposit $138 from your paycheck. What is your new balance?

    A) $1234   B) $800   C) $810   D) $534

164) _____

165) An employee was paid $84,450 during the first half of last year. During the second half he was paid $96,078. How much more was his income during the second half?

    A) $180,528   B) $11,628   C) $180,427   D) $11,527

165) _____

166) The list price of a car is $15,066. The manufacturer offers a rebate of $665. What is the final price of the car?

    A) $15,731   B) $14,401   C) $15,631   D) $14,301

166) _____

167) The dimensions of a rectangular yard are 28 feet by 115 feet. What is its perimeter?

    A) 286 feet   B) 171 feet   C) 143 feet   D) 3220 feet

167) _____

Multiply.

168) 6×100

    A) 60   B) 600   C) 6000   D) 1200

168) _____

169) 42×100

    A) 42,000   B) 8400   C) 420   D) 4200

169) _____

170) 100×18

    A) 180   B) 18,000   C) 3600   D) 1800

170) _____

171) $5,000 \times 1,000$

    A) 5,000,000   B) 1,000,000   C) 5,000,000,000   D) 5,000

171) _____

172) $600 \times 10,000$

    A) 6,000   B) 6,000,000   C) 60,000   D) 600

172) _____

173) 82×10

    A) 820   B) 8200   C) 82,000   D) 1640

173) _____

174) 70×100

    A) 7000   B) 700   C) 14,000   D) 70,000

174) _____

175) 770×70

    A) 53,890   B) 53,900   C) 53,896   D) 53,910

175) _____

176) 770×100

    A) 77,000   B) 15,400   C) 7700   D) 770

176) _____

177) 2500×400

    A) 999,501   B) 999,000   C) 1,001,000   D) 1,000,000

177) _____

178)

77

$\times\ 7$

    A) 499   B) 539   C) 639   D) 504

178) _____

179)

507

$\times\ \ \ 8$

    A) 96   B) 456   C) 4560   D) 4056

179) _____

180)

389

$\times\ 6$

    A) 2344   B) 2434   C) 2334   D) 2234

180) _____

181)

2740

$\times\ \ \ 3$

    A) 8320   B) 8120   C) 8220   D) 8230

181) _____

182)

21,699

$\times\ \ \ \ 5$

    A) 108,485   B) 108,595   C) 108,495   D) 108,455

182) _____

183)

979,683

$\times\ \ \ \ \ \ 8$

    A) 7,867,464   B) 7,837,464   C) 7,888,264   D) 7,918,264

183) _____

184)

5,360,000

$\times\ \ \ \ \ \ 5$

    A) 26,801,100   B) 26,901,000   C) 26,800,000   D) 26,788,900

184) _____

185)

6,850,000

$\times\ \ \ \ \ \ 9$

    A) 61,751,000   B) 61,651,100   C) 61,650,000   D) 61,638,900

185) _____

186)

15

$\times$ 91

A) 1365   B) 1465   C) 1355   D) 1375

187)

742

$\times$ 53

A) 38,325   B) 39,336   C) 39,326   D) 39,426

188)

6838

$\times$ 15

A) 102,470   B) 102,671   C) 101,569   D) 102,570

189)

9235

$\times$ 20

A) 185,800   B) 184,700   C) 185,710   D) 183,590

190)

397

$\times$ 750

A) 297,740   B) 297,750   C) 297,760   D) 297,850

191)

3595

$\times$ 454

A) 1,632,230   B) 1,631,130   C) 1,642,130   D) 1,632,130

192)

3087

$\times$ 9995

A) 30,854,565   B) 30,854,665   C) 30,864,565   D) 30,853,565

193)

56,470

$\times$ 1831

A) 103,386,560   B) 103,395,570   C) 103,406,580   D) 103,396,570

194) (49)(31)
    A) 1519   B) 1509   C) 1619   D) 1529   194) _____

195) (58)(989)
    A) 57,352   B) 57,462   C) 57,362   D) 57,372   195) _____

196) (914)(84)
    A) 76,786   B) 76,876   C) 76,776   D) 76,766   196) _____

197) 144 • 321
    A) 46,325   B) 46,224   C) 45,923   D) 46,214   197) _____

198) 16 • 70
    A) 1120   B) 1110   C) 819   D) 1221   198) _____

199) (306)(103)
    A) 31,217   B) 31,508   C) 31,619   D) 31,518   199) _____

200) 4100 × 18
    A) 7380   B) 73,799   C) 73,800   D) 7379   200) _____

201) 900 × 302
    A) 361,800   B) 27,180   C) 288,000   D) 271,800   201) _____

202) 203 × 101
    A) 20,503   B) 40,803   C) 23,230   D) 22,330   202) _____

203) 101 × 87
    A) 9797   B) 18,887   C) 9570   D) 8787   203) _____

204) 32 • 9 • 4
    A) 1142   B) 1162   C) 1141   D) 1152   204) _____

205) 64 • 15 • 7
    A) 6710   B) 6720   C) 6731   D) 6709   205) _____

206) 5 × 14 × 83
    A) 5799   B) 5810   C) 5821   D) 5800   206) _____

207) 11 × 3 × 12
    A) 397   B) 395   C) 396   D) 385   207) _____

208) (10) (20) (200)
    A) 40,000   B) 40,100   C) 39,800   D) 39,900   208) _____

209) (20)(20)(50)
    A) 19,900   B) 19,990   C) 20,000   D) 20,100   209) _____

210) $29 \times 98 \times 3$

    A) 8526   B) 8626   C) 8516   D) 8426

210) _____

211) $54 \times 4 \times 89$

    A) 19,224   B) 19,235   C) 19,214   D) 19,213

211) _____

In each group of four products, one is wrong. Use estimation to determine which product is incorrect.

212)

    A) $66 \times 469 = 31{,}064$ B) $182 \times 40 = 7280$

    C) $549 \times 75 = 41{,}175$ D) $229 \times 56 = 12{,}824$

212) _____

213)

    A) $233 \times 68 = 15{,}855$ B) $153 \times 35 = 5355$

    C) $47 \times 237 = 11{,}139$ D) $446 \times 89 = 39{,}694$

213) _____

214)

    A) $2 \times 1418 = 2836$ B) $275 \times 78 = 21{,}450$

    C) $2973 \times 67 = 199{,}191$ D) $1772 \times 2 = 2444$

214) _____

215)

    A) $41 \times 432 = 18{,}233$ B) $181 \times 90 = 16{,}290$

    C) $4034 \times 60 = 242{,}040$ D) $213 \times 32 = 6816$

215) _____

216)

    A) $174 \times 84 = 15{,}046$ B) $207 \times 60 = 12{,}420$

    C) $226 \times 73 = 16{,}498$ D) $37 \times 314 = 11{,}618$

216) _____

Solve.

217) How many months are there in 26 years?

    A) 48 months   B) 312 months   C) 38 months   D) 322 months

217) _____

218) Carlos averages 19 miles per gallon of gasoline in his car. How far can he travel on 14 gallons of gasoline?

    A) 36 miles   B) 33 miles   C) 266 miles   D) 269 miles

218) _____

219) Each box of matches contains 240 matches. Boxes of matches are shipped in cartons. Each carton contains 15 boxes of matches. How many matches are in each carton?

    A) 360   B) 255   C) 16   D) 3600

219) _____

220) A map has a scale of 3 miles to the inch. How far apart in reality are two cities that are 24 inches apart on the map? How far apart on the map are two cities that, in reality, are 24 miles apart?

A) 8
m
il

es; 72 inches

B) 8 miles; 8 inches

C) 72 miles; 72 inches

D) 72 miles; 8 inches

221) A community garden contains 35 rectangular plots each measuring 6 yd by 10 yd. What is the total area available for gardening?

221) _____

A) 2100 yd^2 B) 1120 yd^2 C) 2135 yd^2 D) 60 yd^2

222) From the building floor plan depicted in the figure, calculate the floor space area.   222) _____

5 m   6 m
                    5 m

20 m

                15 m

A) 270 m^2 B) 280 m^2 C) 275 m^2 D) 65 m^2

223) Susan's back yard is rectangular with dimensions 36 yd. by 73 yd. Carlos's back yard is rectangular   223) _____
with dimensions 30 yd. by 57 yd. How much larger is the area of Susan's back yard than the area
of Carlos's back yard?

A) 44 yd.^{2} B) 2628 yd.^{2} C) 918 yd.^{2} D) 4338 yd.^{2}

224) A travel agent arranged a payment plan for a client. It required a down payment of $250 and 6   224) _____
monthly payments of $573. What was the total cost of the plan?

A) $3688   B) $3538   C) $3588   D) $3438

225) Hannah owns 27 acres of land which she rents to a timber grower for $3933 per acre per year. Her   225) _____
property taxes are $780 per acre per year. How much profit does she make on the land each year?

A) $106,971   B) $105,411   C) $85,131   D) $127,251

226) In preparation for his new job, Tristan bought two suits at $184 a piece, four shirts at $27 a piece,   226) _____
two pairs of shoes at $73 a piece, four ties at $27 a piece, and five pairs of socks at $6 a piece. What
was the total cost of these items?

A) $760   B) $730   C) $317   D) $781

Divide.

227) 4)‾50,000‾   227) _____
A) 125,000   B) 12,501   C) 1250   D) 12,500

228) 6)‾288‾   228) _____
A) 49   B) 50   C) 47   D) 48

229) 3)‾810‾   229) _____
A) 270   B) 269   C) 268   D) 271

230) 3)‾9744‾   230) _____
A) 3246   B) 3249   C) 3247   D) 3248

231) 4)‾36,888‾   231) _____
A) 9221   B) 9224   C) 9222   D) 9223

232) $3 \overline{)18,360}$ 232) _____

 A) 6121   B) 6122   C) 6120   D) 6119

)

)

)

)

233) 7)22,225
    A) 3175   B) 3176   C) 3177   D) 3173   233) _____

234) 5)3600
    A) 720   B) 721   C) 722   D) 719   234) _____

235) 4)92,160
    A) 23,040   B) 23,039   C) 23,042   D) 23,041   235) _____

236) 3)5,059,140
    A) 1,686,379   B) 1,686,380   C) 1,686,382   D) 1,686,381   236) _____

237) 200 ÷ 20
    A) 10   B) 40   C) 1000   D) 4000   237) _____

238) 800 ÷ 80
    A) 10   B) 64,000   C) 1000   D) 640   238) _____

239) 4000 ÷ 80
    A) 3200   B) 500   C) 50   D) 320,000   239) _____

240) $\frac{800}{20}$
    A) 160   B) 4000   C) 40   D) 16,000   240) _____

241) $\frac{6000}{30}$
    A) 180,000   B) 200   C) 1800   D) 20,000   241) _____

242) $\frac{70,000}{50}$
    A) 1400   B) 3,500,000   C) 35,000   D) 14,000   242) _____

243) 871 ÷ 43
    A) 20 R 11   B) 18 R 7   C) 20   D) 19 R 34   243) _____

244) 2260 ÷ 20
    A) 113   B) 114 R 10   C) 114   D) 113 R 11   244) _____

245) 28)5969
    A) 216 R 20   B) 213   C) 213 R 5   D) 216 R 5   245) _____

246) 63)29,295
    A) 455   B) 465   C) 470 R 48   D) 475 R 56   246) _____

247) 48)15,963   247) _____
       A) 332 R 8   B) 332   C) 27   D) 332 R 27

248) 376) 153,408   248) _____
       A) 409   B) 408   C) 407   D) 4080

249) 32)41,760   249) _____
       A) 1305   B) 13,050   C) 1304   D) 1306

250) 306,540 ÷ 65   250) _____
       A) 4715   B) 4717   C) 4716   D) 47,160

251) 63)80,395   251) _____
       A) 1276 R 7   B) 12,760 R 7   C) 1276 R 9   D) 1276 R 5

252) 41)216,212   252) _____
       A) 5273 R 17   B) 52,730 R 19   C) 5273 R 21   D) 5273 R 19

Use estimation to determine which quotients is wrong.

253)   253) _____
       A) 881,226 ÷ 54 = 19,319   B) 17,385,236 ÷ 44 = 395,119
       C) 3,910,680 ÷ 72 = 54,315   D) 17,475,020 ÷ 422 = 41,410

254)   254) _____
       A) 4,459,319 ÷ 67 = 67,557   B) 16,298,688 ÷ 48 = 339,556
       C) 1,450,620 ÷ 60 = 24,177   D) 10,075,296 ÷ 336 = 29,986

255)   255) _____
       A) 1,128,562 ÷ 38 = 33,699   B) 21,582,612 ÷ 81 = 266,452
       C) 936,512 ÷ 32 = 29,266   D) 4,300,683 ÷ 183 = 23,501

256)   256) _____
       A) 545,525 ÷ 25 = 21,821   B) 13,413,036 ÷ 71 = 188,916
       C) 903,504 ÷ 28 = 30,268   D) 1,978,671 ÷ 157 = 12,603

257)   257) _____
       A) 13,335,600 ÷ 80 = 166,695   B) 728,157 ÷ 23 = 31,659
       C) 465,168 ÷ 12 = 38,764   D) 2,925,780 ÷ 130 = 17,506

258)   258) _____
       A) 1,064,064 ÷ 24 = 44,336   B) 955,812 ÷ 26 = 36,762
       C) 18,402,768 ÷ 82 = 220,424   D) 5,488,470 ÷ 195 = 28,146

Solve.

259) A group of 3 people wants to buy a boat. The boat costs $981. If they all pay the same amount, how   259) _____
     much is each person's share?
       A) $317   B) $245   C) $337   D) $327

260) The city bridge has 8 lanes, all carrying equal numbers of cars. If 304 cars drive across the bridge, how many cars cross in each lane?

A) 312 cars   B) 46 cars   C) 39 cars   D) 38 cars

260) _____

261) Richard's team wants to plant 417 trees in 3 months. How many trees per month do they need to plant?

A) 278 trees   B) 139 trees   C) 149 trees   D) 142 trees

261) _____

262) Alicia sold $6984 in paintings at the art fair. If she sold 8 paintings total, and they all sold for the same amount, what was the price of one painting?

A) $873   B) $773   C) $884   D) $911

262) _____

263) Just Hardware has a profit of $333,454. This profit is to be divided evenly between 46 employee owners. Find the profit received by each owner.

A) $12,248   B) $15,338,884   C) $19,594   D) $7249

263) _____

264) Mr. and Mrs. Gutierrez borrow $6000 to buy a new car. The loan is to be paid off in 20 equal monthly payments. How much is each payment?

A) $6020   B) $5980   C) $30   D) $300

264) _____

265) 209 chocolates are to be packed into boxes each of which will contain 9 chocolates. How many boxes of chocolates will there be? How many chocolates will be left over?

A) 22 boxes; 3 chocolates left over   B) 23 boxes; no chocolates left over
C) 22 boxes; 2 chocolates left over   D) 23 boxes; 2 chocolates left over

265) _____

266) A spreadsheet contains 570 entries in a rectangular array which has 30 rows. How many entries are in each row?

A) 17,100   B) 540   C) 19   D) 29

266) _____

267) Danny buys 5 books at $46 each and pays for them with 10-dollar bills. How many $10 bills did it take?

A) 6   B) 220   C) 23   D) 230

267) _____

Simplify.

268) 6^2

A) 37   B) 13   C) 12   D) 36

268) _____

269) 14^2

A) 29   B) 196   C) 28   D) 197

269) _____

270) 4^3

A) 64

270) _____

B) 65

C) 12

D) 13

271) 5^3 271) _____
    A) 125   B) 126   C) 16   D) 15

Express as a power of 10.
272) 1000   272) _____
    A) 10   B) 10^4 C) 10^2 D) 10^3

273) 100,000

    A) 10^7 B) 10^6 C) 10^4 D) 10^5

273) _____

274) 10,000,000,000

    A) 10^{12} B) 10^{11} C) 10^{10} D) 10^9

274) _____

275) 1,000,000

    A) 10^8 B) 10^5 C) 10^6 D) 10^7

275) _____

276) 1000

    A) 10^2 B) 10^4 C) 10^3 D) 10^5

276) _____

Express the number in terms of powers of the numbers in the expression.

277) 3 • 3 • 5 • 5

    A) 2(3) • 2(5)   B) $3^4 • 5^4$ C) $3^2 • 5^2$ D) 3 • 5

277) _____

278) 3 • 5 • 3 • 5

    A) $3^4 • 5^4$ B) $3^2 • 5^2$ C) 3 • 5   D) 2(3) • 2(5)

278) _____

279) 2 • 2 • 2 • 3

    A) $2 • 3^3$ B) 2 • 3   C) $2^3 • 3$ D) 3(2) • 3

279) _____

280) 5 • 7 • 5

    A) 5 • 7   B) $5 • 7^2$ C) 2(5) • 7   D) $5^2 • 7$

280) _____

281) 2 • 5 • 5 • 5

    A) $2 • 5^3$ B) 2 • 5   C) 2 • 3(5)   D) $2^3 • 5$

281) _____

282) 5 • 2 • 5 • 2 • 5

    A) 2(2) • 3(5)   B) $2^5 • 5^5$ C) 2 • 5   D) $2^2 • 5^3$

282) _____

Write the number in standard form.

283) $4^2 • 5^2$

    A) 400   B) 81   C) 80   D) 41

283) _____

284) $9^2 • 10^3$

    A) 540   B) 1081   C) 81,000   D) 5.31441e+11

284) _____

285) $3^5 • 6^2$

    A) 180   B) 8748   C) 279   D) 612,220,032

285) _____

286) $2^4 • 4^2$

    A) 262,144   B) 256   C) 64   D) 32

286) _____

Evaluate.

287) $240 \div 8 - 2$
    A) 40   B) 234   C) 230   D) 28

287) _____

288) $6^2 + 2^2$
    A) 32   B) 16   C) 40   D) 64

288) _____

289) $21 + 22 \bullet 19$
    A) 817   B) 62   C) 481   D) 439

289) _____

290) $8 \bullet 3 - 3$
    A) 72   B) 27   C) 0   D) 21

290) _____

291) $73 - 6 \bullet 5 \bullet 2$
    A) 60   B) 670   C) 13   D) 86

291) _____

292) $8^2 - 3 \bullet 8$
    A) 200   B) 40   C) 488   D) 320

292) _____

293) $4^2 + 8^2 \div 2^2$
    A) 32   B) 36   C) 20   D) 84

293) _____

294) $(6 + 5)^2$
    A) 41   B) 61   C) 121   D) 31

294) _____

295) $(13 - 11)^2 + (6 + 2)^2$
    A) 88   B) 100   C) 68   D) 44

295) _____

296) $5 \bullet (3 + 3)^2 - 2 \bullet (6 - 4)^2$
    A) 316   B) 712   C) 884   D) 172

296) _____

297) $\dfrac{4 + 2}{4 - 2}$
    A) 5   B) 3   C) 2   D) 4

297) _____

298) $\dfrac{9 - 2}{3 + 4}$
    A) 9   B) 3   C) 1   D) 7

298) _____

299) $8^2 - 1$
    A) 63   B) 15   C) 64   D) 65

299) _____

300) $(4 + 1)(4 - 1)$
    A) 16   B) 7   C) 17   D) 15

300) _____

301) $\left(\dfrac{13-4}{2+1}\right)^2$ 301) _____

    A) 81   B) 16   C) 9   D) 3

302) $\dfrac{7^2 + 9^2}{2}$ 302) _____

    A) 130   B) 65   C) 1   D) 16

303) $41 + 6 \cdot 408 \div 8$ 303) _____

    A) 347   B) 89   C) 2397   D) 376

304) $58 \cdot 32 + 34 \cdot 17^2 \div 2$ 304) _____

    A) 6779   B) 2444   C) 2434   D) 6769

305) $50(50 - 19)(50 - 14)(50 - 22)$ 305) _____

    A) 1,370,200   B) 1,128,400   C) 1,897,200   D) 1,562,400

306) $176^2 - 6(24)(16)$ 306) _____

    A) 27,528   B) 33,280   C) 27,512   D) 28,672

Solve the problem.

307) The three squares stand for the numbers 4,6 and 8 in some order. Fill in the squares to make a true statement.   307) _____

$4 \cdot \square + \square \cdot 5 + 7 \cdot \square = 102$

    A) 6, 4, 8   B) 8, 4, 6   C) 4, 6, 8   D) 4, 8, 6

308) The three squares stand for the numbers 4,6 and 8 in some order. Fill in the squares to make a true statement.   308) _____

$\square + 7 \times \square - \dfrac{\square}{2} = 33$

    A) 4, 8, 6   B) 8, 6, 4   C) 8, 4, 6   D) 6, 4, 8

309) The three squares stand for the numbers 4,6 and 8 in some order. Fill in the squares to make a true statement.   309) _____

$\square (9 + \square) - 6 \cdot \square = 30$

    A) 4, 8, 6   B) 6, 4, 8   C) 6, 8, 4   D) 4, 6, 8

310) The three squares stand for the numbers 4,6 and 8 in some order. Fill in the squares to make a true statement.   310) _____

$\dfrac{8}{\square} - \dfrac{\square}{2} + (3 + \square)^2 = 80$

    A) 4, 8, 6   B) 8, 4, 6   C) 8, 6, 4   D) 4, 6, 8

311) The three squares stand for the numbers 4,6 and 8 in some order. Fill in the squares to make a true statement.

$\square + 14 \times \square - \square \div 2 = 58$

A) 6, 4, 8   B) 6, 8, 4   C) 4, 8, 6   D) 8, 6, 4

312) Insert parentheses, if needed, so that the expression on the left is equal to the number on the right.

    $5 + 2 \bullet 3^2 = 63$

    A) $5 + (2 \bullet 3^2)$ B) $5 + (2 \bullet 3)^2$

    C) $(5 + 2) \bullet 3^2$ D) No parentheses needed

313) Insert parentheses, if needed, so that the expression on the left is equal to the number on the right.

    $2 + 4 \bullet 5^2 = 102$

    A) $2 + 4 \bullet (5^2)$ B) $2 + (4 \bullet 5^2)$

    C) $(2 + 4) \bullet 5^2$ D) No parentheses needed

314) Insert parentheses, if needed, so that the expression on the left is equal to the number on the right.

    $8 + 2 \bullet 4^2 = 72$

    A) $(8 + 2) \bullet 4^2$ B) $8 + (2 \bullet 4^2)$

    C) $8 + (2 \bullet 4)^2$ D) No parentheses needed

315) Insert parentheses, if needed, so that the expression on the left is equal to the number on the right.

    $8 - 16 \div 2^2 + 6 = 10$

    A) $(8 - 16) \div 2^2 + 6$ B) $(8 - 16) \div (2^2 + 6)$

    C) $8 - 16 \div (2^2 + 6)$ D) No parentheses needed

316) Insert parentheses, if needed, so that the expression on the left is equal to the number on the right.

    $16 - 12 \div 2^2 + 5 = 6$

    A) $16 - 12 \div (2^2 + 5)$ B) No parentheses needed

    C) $16 - (12 \div 2^2) + 5$ D) $(16 - 12) \div 2^2 + 5$

Find the area of the shaded region.

317)
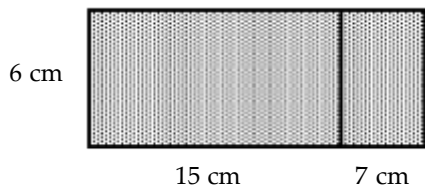
    A) 142 square centimeters   B) 132 square centimeters

    C) 630 square centimeters   D) 48 square centimeters

318)
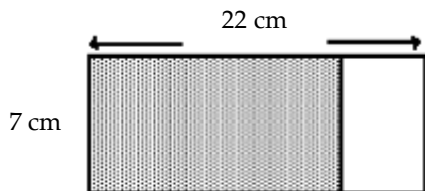
16 cm

A) 42 square centimeters

B) 352 square centimeters

C) 154 square centimeters

D) 52 square centimeters

319)

22 cm

5 cm
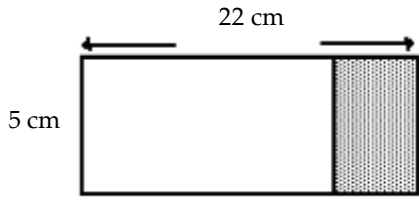
18 cm

A) 30 square centimeters   B) 20 square centimeters

C) 396 square centimeters   D) 110 square centimeters

320)

3 inches
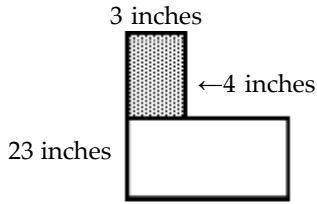
←4 inches

23 inches

7 inches

A) 173 square inches   B) 12 square inches

C) 2 square inches   D) 161 square inches

321)

3 feet
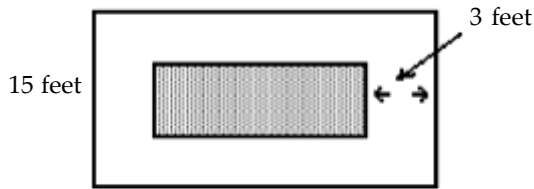
15 feet

28 feet

A) 208 square feet   B) 414 square feet   C) 411 square feet   D) 198 square feet

322)

2 feet

20 feet
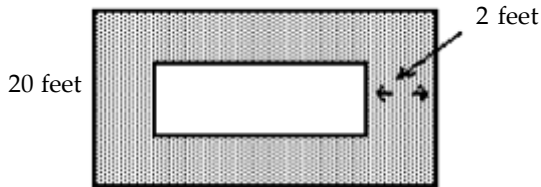
25 feet

A) 492 square feet   B) 164 square feet   C) 496 square feet   D) 154 square feet

323)   323) _____

11 meters

5 meters

20 meters   4 meters
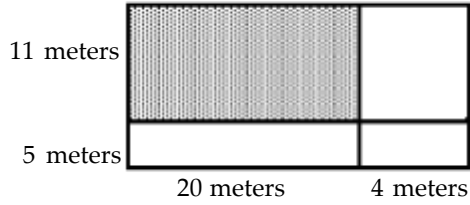
A) 230 square meters   B) 200 square meters
C) 220 square meters   D) 96 square meters

324)   324) _____

9 meters

5 meters

20 meters   4 meters
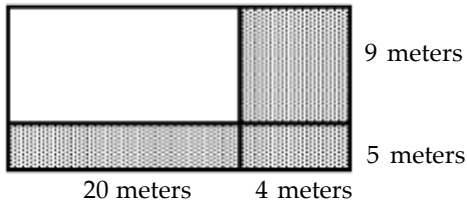
A) 38 square meters   B) 156 square meters
C) 166 square meters   D) 200 square meters

325)   325) _____

8 meters

2 meters

18 meters   5 meters
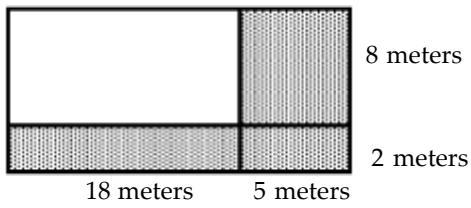
A) 76 square meters   B) 56 square meters
C) 33 square meters   D) 86 square meters

Complete the table.

326)

Input	Output
0	$14 + 5 \times 0 =$
1	$14 + 5 \times 1 =$
2	$14 + 5 \times 2 =$

A)

Input	Output
0	$14 + 5 \times 0 = 0$
1	$14 + 5 \times 1 = 5$
2	$14 + 5 \times 2 = 10$

B)

Input	Output
0	$14 + 5 \times 0 = 14$
1	$14 + 5 \times 1 = 19$
2	$14 + 5 \times 2 = 24$

C)

Input	Output
0	$14 + 5 \times 0 = 0$
1	$14 + 5 \times 1 = 19$
2	$14 + 5 \times 2 = 38$

D)

Input	Output
0	$14 + 5 \times 0 = 14$
1	$14 + 5 \times 1 = 19$
2	$14 + 5 \times 2 = 38$

327)

Input	Output
0	$22 - 6 \times 0 =$
1	$22 - 6 \times 1 =$
2	$22 - 6 \times 2 =$

A)

Input	Output
0	$22 - 6 \times 0 = 0$
1	$22 - 6 \times 1 = 6$
2	$22 - 6 \times 2 = 12$

B)

Input	Output
0	$22 - 6 \times 0 = 22$
1	$22 - 6 \times 1 = 16$
2	$22 - 6 \times 2 = 32$

C)

Input	Output
0	$22 - 6 \times 0 = 22$
1	$22 - 6 \times 1 = 16$
2	$22 - 6 \times 2 = 10$

D)

Input	Output
0	$22 - 6 \times 0 = 0$
1	$22 - 6 \times 1 = 16$
2	$22 - 6 \times 2 = 32$

Find the average.

328) 18, 40

    A) 28   B) 29   C) 30   D) 58

329) 221, 205

    A) 214   B) 426   C) 213   D) 212

330) 150, 156, 162

    A) 153   B) 155   C) 160   D) 156

331) 76, 69, 89

    A) 234   B) 79   C) 77   D) 78

331) _____

332) 24, 29, 28

    A) 27   B) 26   C) 28   D) 81

332) _____

333) 11, 16, 15, 22

    A) 17   B) 15   C) 16   D) 64

333) _____

334) Eight 6's and four 3's

    A) 3   B) 5   C) 4   D) 6

334) _____

335) 35 pounds, 40 pounds, 30 pounds

    A) 104 pounds   B) 35 pounds   C) 105 pounds   D) 34 pounds

335) _____

336) 22 hours, 21 hours, 14 hours

    A) 20 hours   B) 58 hours   C) 19 hours   D) 57 hours

336) _____

Solve.

337) A 36 –story high rise apartment has 343,368 square feet of space to rent. What is the average rental space on a floor?

    A) 12,361,248 sq ft   B) 9538 sq ft   C) 21,883 sq ft   D) 14,537 sq ft

337) _____

338) For five 18 hole rounds of golf, your scores were 92, 91, 95, 88, 89. What was your average score?

    A) 92   B) 90   C) 89   D) 91

338) _____

339) For three months the sales for your department were $7698, $8198, $7198. What was your departmental average?

    A) $7198   B) $37,490   C) $6698   D) $7698

339) _____

340) For four airplane, trips you experienced the following delays 27 minutes, 31 minutes, 19 minutes, 23 minutes. What was the average delay?

    A) 101 min   B) 25 min   C) 100 min   D) 24 min

340) _____

341) A survey of hourly wages stated that the hourly wages for an entry level worker for clerk's position were $6, $6, $9. Find the average hourly wage.

    A) $21   B) $22   C) $7   D) $8

341) _____

342) The weights of five National Football League football players are 304 pounds, 278 pounds, 276 pounds, 310 pounds, 322 pounds. Find the average weight.

A) 298 lb

B) 297 lb   C) 282 lb   D) 1490 lb   342) _____

343) For three days on your vacation you drove 372 miles, 346 miles, 344 miles. What was the average   343) _____
daily miles driven?
A) 1063 mi   B) 1062 mi   C) 355 mi   D) 354 mi

344) In your department the ages of the employees are 31, 43, and 46. Find the average age of the three   344) _____
employees.
A) 38   B) 40   C) 41   D) 39

345) Are these three numbers a Pythagorean triple?
345) _____

    8, 15, 17
     A) Yes
     B) No
     C) Not possible to determine

346) If an object is dropped off a cliff, after 14 seconds it will have fallen $\dfrac{32 \cdot 14^2}{2}$ feet, ignoring air
346) _____

    resistance. Express this distance in standard form, without exponents.
     A) 6272 ft   B) 3136 ft   C) 46 ft   D) 212 ft

Choose a strategy and solve.

347) Your car gets about 24 miles per gallon. You are planning to drive to see your friends who live
347) _____
    about 705 miles away. How many gallons of gas will need to purchase to make the trip to see your
    friends and to return home? State your answer to the nearest gallon.
     A) About 24 gallons   B) About 27 gallons
     C) About 34 gallons   D) About 59 gallons

348) Originally your car cost $13,280. Four years later your car cost $19,936. How much did the price
348) _____
    increase?
     A) No increase, it was a decrease.   B) $6656
     C) $7656   D) $5656

349) Next year you anticipate that your property tax will be $4984. You have already saved $1148. How
349) _____
    much more do you need to save?
     A) $3736
     B) $3936
     C) $3836
     D) No need to save, you have saved enough money.

350) Tuition at your college is $33 per credit hour. You are planning to take four 3 credit hour courses.
350) _____
    What will the tuition bill be for all of your courses?
     A) $396   B) $462   C) $132   D) $99

351) While shopping for used books, you note that the average price is about $8 per book including tax.
351) _____
    You have $137 in your pocket. About how many books can you buy?
     A) 19 books   B) 21 books   C) 14 books   D) 17 books

352) You are planning a driving vacation, and you want to estimate the cost of the gas. While on
352) _____
    vacation, you are planning to drive 4000 miles. Your car gets about 40 miles per gallon, and you
    estimate that the cost of gas is $1.82 per gallon. What is your estimate for the cost of the gasoline
    for the the vacation?
     A) $182.00   B) $223.86   C) $227.50   D) $145.60

353) You are planning a driving vacation, and you want to estimate the cost of the gas. While on
vacation, you are planning to drive 1500 miles. Your car gets about 15 miles per gallon, and you
estimate that the cost of gas is $1.74 per gallon. If your take home pay for your part time job
$12 per hour, about how many hours will you need to work to pay for the gas? Round to the
nearest hour.

   A) 15 hours   B) 13 hours   C) 174 hours   D) 14 hours

354) Your daily routine consists of driving 35 minutes to college in the morning, then driving 20 minutes to your job, and finally 34 minutes driving home. You do this every day, Monday through Friday. How many minutes do you spend in your car Monday through Friday on these routine trips? Express your answer in minutes.

  A) 89 minutes   B) 445 minutes   C) 455 minutes   D) 356 minutes

355) Two years ago you weighed 224 pounds. A year ago you weighed 190 pounds, and this year you weigh 179 pounds. How many pounds did you lose overall?

  A) 34 pounds   B) 45 pounds
  C) 11 pounds   D) No weight loss, you gained weight.

356) You need to purchase four tires for your car, and you found that the tire you need is $61.83 per tire installed including all taxes. You have $229 in your checking account. Do you have enough money in your checking account?

  A) No   B) Yes

Use a calculator to solve.

357) After agreeing to purchase a car, you are told that your monthly payment will be $410.16 for 24 months. In addition, you are required to make a down payment of $1,000. What will be the total amount you will pay for the car?

  A) $9843.84   B) $8843.84   C) $9943.84   D) $10,843.84

358) You attend a college and are taking a mathematics class. A total of 30 students are registered for the course. The class is a 5 credit course, and the tuition rate is $30 per credit. What is the total amount of tuition paid by all the students in the class?

  A) $4490   B) $900   C) $150   D) $4500

359) A large company decided to reduce the number of its employees. Prior to the reduction the company employed 44,656 people. The company decided to fire 3477 employees. How people were employed after the reduction?

  A) 41,190 people B) 41,179 people C) 41,168 people D) 48,133 people

360) A large company decided to reduce the number of its employees. The company decided to fire 3103 employees. After the reduction the company employed 47,675 people. How people were employed prior to the reduction?

  A) 44,583 people B) 50,778 people C) 44,572 people D) 50,767 people

361) You have agreed purchase a washer and dryer for $1580 including installation and taxes. You also agree to make a down payment of $120 and pay the balance in four payments. How much is each of the four payments?

  A) $425   B) $1590   C) $110   D) $365

Solve.

362) I am thinking of a whole number. My number, rounded to the nearest hundred, is 800. When the

nu
mb

er is rounded to the nearest ten, it is 840. What numbers am I thinking of?

A) 850, 851, 852, 853, 854

B) 845, 846, 847, 848, 849

C) 835, 836, 837, 838, 839

D) 840, 841, 842, 843, 844

362) _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

363) Why is the symbol, 0, important for base ten number system? 363) _____

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

364) Write this expression in words. 364) _____
   $7 + 13 = 20$
   A) The difference between 7 and 13 is 20. B) The sum of 7 and 13 is 20.
   C) The product of 7 and 13 is 20. D) The quotient of 7 and 13 is 20.

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

365) Write a response. 365) _____
   Show that $45 \div 9 = 5$ is repeated subtraction.

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

366) Answer the question true or false. 366) _____
   $7^2 + 9^2 = (7 + 9)^2$
   A) False B) True

367) In this expression, which symbol is the base? 367) _____
   3^6

   A) 6 B) 3^6
   C) 3 D) There is no base in this expression.

368) In this expression, which symbol is the exponent? 368) _____
   7^2

   A) 7 B) 7^2
   C) 2 D) There is no exponent in this expression.

369) Use one of the following names to identify the property illustrated by this expression: associative, 369) _____
   commutative, identity, or distributive.
   $43 + 78 = 78 + 43$
   A) Distributive B) Identity C) Associative D) Commutative

370) Use one of the following names to identify the property illustrated by this expression: associative, 370) _____
   commutative, identity, or distributive.
   $21 + 0 = 21$
   A) Identity B) Associative C) Distributive D) Commutative

371) Use one of the following names to identify the property illustrated by this expression: associative, $23 \times (64 + 90) =$
   commutative, identity, or distributive.

$23 \times 64 + 23 \times 90$

A) Identity   B) Distributive   C) Associative   D) Commutative

371) _____

Provide an appropriate response.

372) Write one hundred thirty-seven thousand five hundred thirty-four in standard form.

A) 137,534   B) 375,034   C) 1,307,534   D) 370,534

372) _____

373) Underline the digit that occupies the ten thousands place in 1,692,797.

373) _____

    A) 1,692,797   B) 1,692,797   C) 1,692,797   D) 1,692,797

       _   _   _   _

374) Write 402,700,070 in words.

374) _____

    A) four hundred two million, seventy thousand, seventy
    B) four hundred two million, seven hundred thousand, seven hundred
    C) four hundred two million, seven hundred thousand, seventy
    D) four hundred two million, seventy thousand, seven

375) Round 493,749,428 to the nearest hundred thousand.

375) _____

    A) 500,000,000   B) 493,700,000   C) 493,800,000   D) 400,000,000

376) Find the sum of 1946 and 325.

376) _____

    A) 2261   B) 2271   C) 2171   D) 5196

377) Subtract 1573 from 8020.

377) _____

    A) 7557   B) 8557   C) 7553   D) 6447

378) Subtract: 60,000 − 18,329

378) _____

    A) 41,671   B) 62,781   C) 68,329   D) 58,329

379) Multiply: 128×403

379) _____

    A) 51,685   B) 51,283   C) 51,574   D) 51,584

380) Compute: $\dfrac{66,600}{37}$

380) _____

    A) 1805 R 20   B) 1790   C) 1810 R 28   D) 1800

381) Find the quotient: $26\overline{)22,463}$

381) _____

    A) 863 R 9   B) 25   C) 863 R 25   D) 863

382) Evaluate: 11^4

382) _____

    A) 1331   B) 44   C) 4,194,304   D) 14,641

383) Write $3 \bullet 3 \bullet 5 \bullet 5 \bullet 5$ using exponents.

383) _____

    A) $3 \bullet 5$ B) $3^5 \bullet 5^5$ C) $2(3) \bullet 3(5)$ D) $3^2 \bullet 5^3$

Simplify.

384) $9 \bullet 8 + 6 \bullet 5^2$

385) $52 −$
$2^3 \bullet (11 −$

    A) 132   B) 222   C) 3150   D) 1260

7)
    A) 20   B) 176   C) 43   D) 48

384) _____

385) _____

Solve.

386) Last year the base model of a new car cost $18,390. This year's model costs $20,526. How much more does this year's model cost?

   A) $38,916   B) $37,916   C) $2036   D) $2136

386) _____

387) A plot of land which is up for sale is advertised as being 25 acres. If there are 43,560 square feet in an acre, how many square feet does the plot of land cover?

    A) 1,089,000 sq ft   B) 1,089,500 sq ft   C) 43,585 sq ft   D) 1,088,750 sq ft

388) Francis has a total of $3204 in her checking account. If she writes a check for each of the items below, how much money will be left in her account?

phone $ 48
rent $750
car $429

    A) $1227   B) $1976   C) $1967   D) $1977

389) A florist filled four orders for wedding flowers and made the following amounts of money: $206, $632, and $653. How much money on the average did she make per order?

    A) $522   B) $572   C) $546   D) $422

390) Vinyl sheet flooring is to be installed in an area shaped as shown. If the vinyl flooring costs $7 for each square meter, how much will it cost to cover the area?

    18 m
        4 m

  1

    4 m
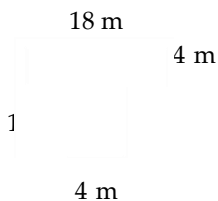
    A) $574   B) $840   C) $644   D) $588

391) For lunch, you have an 8–ounce (oz) serving of skim milk, 1/3 cup of broccoli, and 2 cups of salmon salad. Based on the following table, how much more calcium do you need to reach the recommended 59 milligrams (mg)?

Food	Quantity	Calcium Content
Skim milk	8 oz	28 mg
Broccoli	1 cup	21 mg
Salmon salad	1 cup	10 mg

    A) 3 mg   B) 27 mg   C) 10 mg   D) 4 mg

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

51) D
52) C
53) C
54) B
55) C
56) A
57) A
58) C
59) D
60) C
61) B
62) A
63) D
64) B
65) B
66) C
67) C
68) A
69) C
70) D
71) A
72) B
73) A
74) D
75) B
76) A
77) D
78) C
79) B
80) B
81) B
82) D
83) D
84) C
85) C
86) A
87) B
88) B
89) D
90) A
91) C
92) A
93) A
94) B
95) B
96) D
97) C
98) D
99) B
100) D

101) A
102) D
103) B
104) B
105) C
106) A
107) D
108) C
109) D
110) B
111) A
112) D
113) C
114) C
115) A
116) C
117) C
118) D
119) A
120) B
121) D
122) B
123) C
124) D
125) A
126) A
127) B
128) A
129) B
130) A
131) B
132) C
133) D
134) D
135) B
136) A
137) A
138) D
139) C
140) D
141) D
142) A
143) C
144) B
145) B
146) B
147) D
148) B
149) A
150) C

151) A
152) D
153) B
154) C
155) C
156) A
157) A
158) D
159) D
160) B
161) B
162) A
163) A
164) C
165) B
166) B
167) A
168) B
169) D
170) D
171) A
172) B
173) A
174) A
175) B
176) A
177) D
178) B
179) D
180) C
181) C
182) C
183) B
184) C
185) C
186) A
187) C
188) D
189) B
190) B
191) D
192) A
193) D
194) A
195) C
196) C
197) B
198) A
199) D
200) C

201) D
202) A
203) D
204) D
205) B
206) B
207) C
208) A
209) C
210) A
211) A
212) A
213) A
214) D
215) A
216) A
217) B
218) C
219) D
220) D
221) A
222) B
223) C
224) A
225) C
226) A
227) D
228) D
229) A
230) D
231) C
232) C
233) A
234) A
235) A
236) B
237) A
238) A
239) C
240) C
241) B
242) A
243) A
244) A
245) C
246) B
247) D
248) B
249) A
250) C

251) A
252) D
253) A
254) A
255) A
256) C
257) D
258) C
259) D
260) D
261) B
262) A
263) D
264) D
265) D
266) C
267) C
268) D
269) B
270) A
271) A
272) D
273) D
274) C
275) C
276) C
277) C
278) B
279) C
280) D
281) A
282) D
283) A
284) C
285) B
286) B
287) D
288) C
289) D
290) D
291) C
292) B
293) A
294) C
295) C
296) D
297) B
298) C
299) A
300) D

301) C
302) B
303) A
304) D
305) D
306) D
307) C
308) C
309) B
310) B
311) A
312) C
313) D
314) C
315) D
316) D
317) B
318) A
319) B
320) B
321) D
322) B
323) C
324) B
325) D
326) B
327) C
328) B
329) C
330) D
331) D
332) A
333) C
334) B
335) B
336) C
337) B
338) D
339) D
340) B
341) C
342) A
343) D
344) B
345) A
346) B
347) D
348) B
349) C
350) A

351) D
352) A
353) D
354) B
355) B
356) A
357) D
358) D
359) B
360) B
361) D
362) D
363) The symbol, 0, is a place holder and enables the reader to easily distinguish between 302, 3,002 and 320. Thus, identical symbols can be used for a variety of numbers.
364) B
365) 9 can be subtracted five times from 45.
366) A
367) C
368) C
369) D
370) A
371) B
372) A
373) D
374) C
375) B
376) B
377) D
378) A
379) D
380) D
381) C
382) D
383) D
384) B
385) A
386) D
387) A
388) D
389) A
390) B
391) D