

Test Bank for Prealgebra and Introductory Algebra 6th Martin-Gay

TEST BANK SAMPLE PREVIEW

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

Answer the question according to what the textbook states.

- 1) Which of these is the most important general tip for success in a mathematics course?
- A) Check your work
 - B) Organize your class materials
 - C) Don't be afraid to ask questions
 - D) Do your homework

Answer: B

- 2) Which of these is NOT listed as a tip to help you succeed in this course?
- A) Know how to get help if you need it.
 - B) Read your textbook after you attend class.
 - C) Form study groups and/or exchange names and e- mail addresses.
 - D) Choose to attend all class periods and do your homework.

Answer: B

- 3) Which of these is NOT an end- of- chapter component designed to help you understand the concepts of the chapter?
- A) Vocabulary Checks
 - B) Calculator Exercises
 - C) Chapter Highlights
 - D) Chapter Tests

Answer: B

- 4) Which of these is listed as one of several steps in preparing for an exam?
- A) Leave for the exam as late as possible to increase your amount of study time.
 - B) Skip the concepts and definitions in the Chapter Highlights at the end of the chapter.
 - C) Practice working out exercises by working the Chapter Review.
 - D) Review your class notes, and skip reviewing previous homework assignments.

Answer: C

Determine the place value of the digit 3 in the whole number.

- 5) 2530
- A) hundreds
 - B) tens
 - C) ones
 - D) thousands

Answer: B

- 6) 30,542
- A) thousands
 - B) tens
 - C) hundred- thousands
 - D) ten- thousands

Answer: D

- 7) 25,304,168
- A) thousands
 - B) hundreds
 - C) hundred- thousands
 - D) ten- thousands

Answer: C

- 8) 30,500,421
- A) millions
 - B) ten- thousands
 - C) tens
 - D) ten- millions

Answer: D

- 9) 1392
- A) tens
 - B) ones
 - C) thousands
 - D) hundreds

Answer: D

10) 403,681,295

- A) hundred- thousands
- C) millions

- B) thousands
- D) hundred- millions

Answer: C

11) 463,981

- A) thousands
- C) hundreds

- B) ten- thousands
- D) hundred- thousands

Answer: A

12) 45,271,903

- A) hundreds
- B) ones

- C) tens
- D) ten- millions

Answer: B

Write the whole number in words.

13) 483

- A) four thousand, eight hundred thirty
- C) four hundred thirty- eight

- B) four hundred eighty- three
- D) four thousand, eighty- three

Answer: B

14) 3072

- A) three thousand, seventy- two
- C) three hundred thousand, seventy- two

- B) three thousand, seven hundred twenty
- D) thirty thousand, seventy- two

Answer: A

15) 5870

- A) five thousand, eight hundred seven
- C) fifty- eight thousand, seventy

- B) five thousand, eight hundred seventy
- D) five hundred eighty- seven

Answer: B

16) 135,060

- A) thirteen thousand, five hundred sixty
- C) one hundred thirty- five thousand, sixty

- B) one million, thirty- five thousand, sixty
- D) thirteen thousand, five hundred six

Answer: C

17) 9,300,695

- 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

Answer: D

18) 22,000,674

- A) two million, two thousand, six hundred seventy- four
- B) twenty- two million, six hundred seventy- four
- C) twenty- two hundred million, six hundred seventy- four
- D) twenty- two million, six thousand seventy- four

Answer: B

19) 64,568,009

- A) sixty- million, five thousand sixty- eight hundred, nine
- B) sixty- four million, five hundred sixty- eight thousand, nine
- C) sixty million, forty- five thousand, sixty- eight hundred and nine
- D) sixty- four million, five hundred thousand, sixty- eight hundred, nine

Answer: B

20) 235,060

- A) two hundred thirty- five thousand, sixty
- B) twenty- three thousand, five hundred sixty
- C) two million, thirty- five thousand, sixty
- D) twenty- three thousand, five hundred six

Answer: A

21) 4,200,091

- A) four million, two hundred ninety- one
- B) four million, two hundred thousand, ninety- one
- C) four million, twenty thousand, ninety- one
- D) forty- two thousand, ninety- one

Answer: B

22) 70,146

- A) seven million, one thousand, forty- six
- B) seven hundred one thousand, forty- six
- C) seventy thousand, one hundred forty- six
- D) seven thousand, one hundred forty- six

Answer: C

Write the number in the sentence in words.

23) Jennilee has 30,000 frequent flier miles.

- A) three hundred thousand
- B) thirty thousand
- C) three thousand
- D) thirty million

Answer: B

24) There were 961 cars parked in the lot outside a large mall.

- A) one hundred sixty- nine
- B) nine thousand sixty- one
- C) six hundred nine
- D) nine hundred sixty- one

Answer: D

25) The Petronas Tower 1, in Kuala Lumpur, Malaysia, is 1483 feet tall.

- A) fourteen thousand, eighty- three
- B) fourteen thousand, eight hundred thirty
- C) one thousand, four hundred thirty- eight
- D) one thousand, four hundred eighty- three

Answer: D

26) The highest point in California is Mount Whitney at an elevation of 14,494 feet.

- A) one thousand, four hundred ninety- four
- B) one hundred forty thousand, four hundred ninety- four
- C) fourteen thousand, nine hundred forty- nine
- D) fourteen thousand, four hundred ninety- four

Answer: D

27) The average population of the suburbs around a certain large city is 72,018.

- A) seventy- two hundred, eighteen
- B) seventy- two thousand, eighteen
- C) seventy- two thousand, one hundred eight
- D) seven thousand, two hundred eighteen

Answer: B

28) The control center was suddenly unable to track the satellite when it reached a distance of 128,615 miles from the earth's surface.

- A) one hundred twenty thousand, eighty- six hundred, fifteen
- B) one hundred twenty- eight thousand, six hundred fifteen
- C) one hundred twenty- eight million, six hundred fifteen
- D) six hundred fifteen thousand, one hundred twenty- eight

Answer: B

29) One of the statistics to come out of the election was that 45,826,498 people, or about half the population, cast votes.

- A) forty- five billion, eight hundred twenty- six million, four hundred ninety- eight thousand
- B) forty- five thousand, eight hundred twenty- six hundred, four hundred, ninety- eight
- C) forty- five million, eight hundred twenty- six thousand, four hundred ninety- eight
- D) forty- five million, eight hundred thousand, twenty- six hundred, four hundred ninety- eight

Answer: C

30) The population of Annie's hometown is approximately 1,650,000.

- A) one million, sixty- five thousand
- B) one hundred sixty- five thousand
- C) sixteen million, five hundred thousand
- D) one million, six hundred fifty thousand

Answer: D

31) Paul has the number 24,730,208 showing on his calculator display.

- A) twenty- four million, seventy- three thousand, two hundred eight
- B) twenty- four million, seven hundred three thousand, two hundred eight
- C) twenty- four million, seven hundred thirty thousand, two hundred eight
- D) twenty- four million, seven hundred thirty thousand, two hundred eighty

Answer: C

Write the whole number in standard form.

32) Eight thousand, one hundred sixty- seven

- A) 800,167
- B) 8167
- C) 810,067
- D) 81,067

Answer: B

33) Thirty- two thousand, nine hundred five

- A) 32,905
- B) 32,950
- C) 320,905
- D) 3295

Answer: A

34) Seven thousand, six

- A) 7060
- B) 7600
- C) 7006
- D) 76,000

Answer: C

35) Six hundred thirty- eight thousand, nine hundred ninety- seven

- A) 638,977
- B) 638,000
- C) 638,997
- D) 638,997,000

Answer: C

36) Two hundred six thousand, one hundred seven

- A) 206,107
- B) 260,170
- C) 207,106
- D) 2617

Answer: A

37) One hundred million, six thousand

A) 100,006,000

B) 106,000,000

C) 1,600,000

D) 1006

Answer: A

38) Ten million, three hundred fifty- four thousand, two hundred three

A) 1,354,203

B) 1,354,230

C) 135,423

D) 10,354,203

Answer: D

39) Seven million, nine thousand, five hundred forty- one

A) 7,090,541

B) 790,541

C) 7,009,541

D) 709,541

Answer: C

Write the whole number in the sentence in standard form.

40) Last year the population of a city increased by two thousand, one hundred eight.

A) 21,008

B) 2018

C) 2108

D) 2180

Answer: C

41) Jamie drove five hundred twenty- seven miles to visit his parents.

A) 5270

B) 5027

C) 572

D) 527

Answer: D

42) Andy collected eighty- two thousand dollars for his campaign.

A) 82,000

B) 80,002

C) 8200

D) 802,000

Answer: A

43) The Johnsons have driven their car forty- nine thousand, eight hundred seven miles in the last few years.

A) 49,870

B) 4987

C) 490,807

D) 49,807

Answer: D

44) A certain exotic sports car costs three hundred twelve thousand, one hundred ninety- nine dollars.

A) 312,199,000

B) 3,201,990

C) 31,219

D) 312,199

Answer: D

45) The population of BigTown is one million, three hundred thirty- five thousand, five hundred six.

A) 133,506

B) 1,335,506

C) 13,035,560

D) 1,035,506

Answer: B

46) Don figured out that he had lived five hundred eighty- two million, sixteen thousand seconds.

A) 582,000,016,000

B) 582,160,000

C) 58,216,000

D) 582,016,000

Answer: D

47) The volume of water in the lake is eight hundred twenty- one million, ninety- four thousand, six hundred thirteen gallons.

A) 82,194,613

B) 821,940,613

C) 821,000,094,613

D) 821,094,613

Answer: D

48) Last year a town consumed ninety- seven million, six thousand twenty- two gallons of water.

A) 97,006,022

B) 976,022

C) 97,060,022

D) 97,006,220

Answer: A

Write the whole number in expanded form.

49) 173

A) $17,300$

B) $100 + 70 + 3$

C) $1000 + 700 + 30$

D) $300 + 70 + 1$

Answer: B

50) 1,742

A) $1000 + 700 + 40 + 2$

B) $1,742,000$

C) $2000 + 400 + 70 + 1$

D) $100 + 40 + 7$

Answer: A

51) 56,314

A) $5000 + 600 + 30 + 14$

B) $50,000 + 6000 + 300 + 10 + 4$

C) $56,314$

D) $40,000 + 1000 + 300 + 60 + 5$

Answer: B

52) 80,300

A) $80,000 + 3000$

B) $80,000 + 300$

C) $8000 + 300$

D) $8,300,000$

Answer: B

53) 8,090

A) $800 + 9$

B) $80,000 + 9000$

C) $809,000$

D) $8000 + 90$

Answer: D

54) 30,670

A) $3000 + 600 + 7$

B) $30,000 + 600 + 70$

C) $30,000 + 6000 + 70$

D) $3000 + 60 + 7$

Answer: B

55) 2,090,360

A) $200,000 + 90,000 + 300 + 60$

B) $2,000,000 + 90,000 + 300 + 60$

C) $2,000,000 + 9000 + 300 + 6$

D) $2,000,000 + 90,000 + 3000 + 60$

Answer: B

56) 38,501,003

A) $38,000,000 + 501,000 + 3$

B) $30,000,000 + 8,000,000 + 500,000 + 1000 + 3$

C) $30,000,000 + 8,000,000 + 500,000 + 100 + 3$

D) $30,000,000 + 800,000 + 50,000 + 1000 + 3$

Answer: B

Write the whole number in the sentence in expanded form.

57) A local radio antenna is 1468 feet tall.

A) $1000 + 400 + 68$

B) $10,000 + 400 + 60 + 8$

C) $1000 + 400 + 60 + 8$

D) $10,000 + 4000 + 600 + 8$

Answer: C

58) Ron and Sally climbed a mountain having an elevation of 1,452 ft.

A) $10,000 + 400 + 50 + 2$

B) $100 + 50 + 4$

C) $10,000 + 4000 + 50 + 2$

D) $1000 + 400 + 50 + 2$

Answer: D

Solve.

59) Write the largest four- digit number that can be made from the digits 6, 3, 8, and 2 if each digit must be used once.

A) 2368

B) 8632

C) 8623

D) 6832

Answer: B

The table shows the number of votes received by each candidate in the last election.

Candidate	Votes
Mr. Olsen	2078
Ms. Li	3760
Mr. Barone	2780
Ms. Vaporis	3706

60) Write in words the number of votes received by Mr. Olsen.

A) two thousand, seven hundred eight

B) twenty thousand, seventy- eight

C) two thousand, seventy- eight

D) two thousand, seven hundred eighty

Answer: C

61) Write in words the number of votes received by Ms. Li.

A) thirty- seven thousand, sixty

B) three thousand, seventy- six

C) three hundred seventy- six

D) three thousand, seven hundred sixty

Answer: D

62) Write the number of votes received by Mr. Barone in expanded form.

A) $2700 + 80$

B) $2000 + 700 + 8$

C) $2000 + 70 + 8$

D) $2000 + 700 + 80$

Answer: D

63) Write the number of votes received by Ms. Vaporis in expanded form.

A) $300 + 70 + 6$

B) $3000 + 70 + 6$

C) $3700 + 6$

D) $3000 + 700 + 6$

Answer: D

64) Who won the election?

A) Mr. Barone

B) Ms. Li

C) Ms. Vaporis

D) Mr. Olsen

Answer: B

65) Which candidate received the fewest votes?

A) Mr. Barone

B) Ms. Vaporis

C) Mr. Olsen

D) Ms. Li

Answer: C

66) Which candidate was in second place in the election?

A) Ms. Vaporis

B) Mr. Olsen

C) Mr. Barone

D) Ms. Li

Answer: A

The table shows the number of votes received by each candidate in an election along with the amount spent by the candidate on advertising. Use the table to answer the question.

Candidate	Number of Votes	Amount Spent on Advertising (\$)
Jose Gonzales	57,209	59,104
Angela Wong	67,108	59,024
Sue Miller	67,091	102,376
Tyler Johnson	41,036	66,514
Sandra Ouye	41,009	72,607

67) Which candidate received the most votes?

A) Jose Gonzales

B) Sandra Ouye

C) Sue Miller

D) Angela Wong

Answer: D

68) Which candidate received the fewest votes?

A) Tyler Johnson

B) Sandra Ouye

C) Jose Gonzales

D) Sue Miller

Answer: B

69) Which candidate spent the least on advertising?

A) Jose Gonzales

B) Angela Wong

C) Tyler Johnson

D) Sandra Ouye

Answer: B

70) How much was spent on advertising by Tyler Johnson?

A) \$66,154

B) \$72,607

C) \$41,036

D) \$66,514

Answer: D

71) How many votes were received by Sue Miller?

A) 67,091

B) 67,108

C) 102,376

D) 67,901

Answer: A

72) Write in words the number of votes received by Jose Gonzales.

A) fifty- seven thousand, twenty- nine

B) fifty- seven thousand, two hundred nine

C) fifty- seven thousand, two hundred ninety

D) five thousand, seven hundred twenty- nine

Answer: B

73) Write in words the amount spent on advertising by Sue Miller.

A) one hundred two thousand, three hundred seventy- six

B) one hundred twenty- three thousand, seven hundred sixty

C) one hundred twenty- three thousand, seventy- six

D) one hundred twenty thousand, three hundred seventy- six

Answer: A

Add.

74) $35 + 12$

A) 47

B) 74

C) 83

D) 56

Answer: A

75) $49 + 93$

A) 141

B) 132

C) 142

D) 143

Answer: C

76)

$$\begin{array}{r} 31 \\ + 34 \\ \hline \end{array}$$

A) 56

B) 47

C) 65

D) 74

Answer: C

77)

$$\begin{array}{r} 32 \\ 13 \\ + 23 \\ \hline \end{array}$$

A) 95

B) 77

C) 68

D) 86

Answer: C

78) $24 + 21 + 13$

A) 76

B) 58

C) 85

D) 67

Answer: B

79)

$$\begin{array}{r} 2 \\ 6 \\ 7 \\ 8 \\ + 2 \\ \hline \end{array}$$

A) 23

B) 26

C) 28

D) 25

Answer: D

80)

$$\begin{array}{r} 33 \\ 43 \\ 4 \\ 33 \\ + 88 \\ \hline \end{array}$$

A) 211

B) 224

C) 237

D) 201

Answer: D

81)

$$\begin{array}{r} 9,556 \\ + 2,378 \\ \hline \end{array}$$

A) 11,934

B) 1,027

C) 1,024

D) 926

Answer: A

82)

$$\begin{array}{r} 1,918 \\ 548 \\ 11 \\ + 8,844 \\ \hline \end{array}$$

A) 11,321

B) 10,221

C) 10,311

D) 11,211

Answer: A

83) $40 + 800 + 70$

A) 154

B) 810

C) 910

D) 91

Answer: C

84) $1,539 + 2,282$

A) 722

B) 3,821

C) 811

D) 823

Answer: B

85) $32,221 + 12,143$

A) 44,634

B) 44,364

C) 53,364

D) 44,635

Answer: B

86) $360 + 2,916$

A) 2,276

B) 3,176

C) 3,286

D) 3,276

Answer: D

87) $784 + 79,435$

A) 79,219

B) 87,275

C) 80,219

D) 81,649

Answer: C

88)

$$\begin{array}{r} 789 \\ + 626 \\ \hline \end{array}$$

A) 1,526

B) 1,425

C) 1,415

D) 1,505

Answer: C

89)

$$\begin{array}{r} 249 \\ + 51 \\ \hline \end{array}$$

A) 290

B) 300

C) 301

D) 759

Answer: B

90)

$$\begin{array}{r} 7,616 \\ + 571 \\ \hline \end{array}$$

A) 8,087

B) 7,187

C) 8,197

D) 8,187

Answer: D

91)

$$\begin{array}{r} 91,060 \\ + \quad 323 \\ \hline \end{array}$$

A) 91,283

B) 91,383

C) 91,393

D) 94,290

Answer: B

92)

$$\begin{array}{r} 63,459 \\ + 49,218 \\ \hline \end{array}$$

A) 111,577

B) 112,677

C) 122,677

D) 111,677

Answer: B

93) $592 + 735$

A) 1,320

B) 1,427

C) 1,420

D) 1,327

Answer: D

94) $6,119 + 977 + 24 + 4,403$

A) 10,423

B) 11,523

C) 11,413

D) 10,513

Answer: B

95)

$$\begin{array}{r} 8,057 \\ 249 \\ 31 \\ + 6,902 \\ \hline \end{array}$$

A) 15,129

B) 14,139

C) 15,239

D) 14,229

Answer: C

96)

$$\begin{array}{r} 49 \\ 725 \\ 4,693 \\ + 16,123 \\ \hline \end{array}$$

A) 21,570

B) 21,490

C) 21,590

D) 20,590

Answer: C

97)

$$\begin{array}{r} 3,899 \\ 253 \\ 71 \\ 6,669 \\ + 3,226 \\ \hline \end{array}$$

A) 13,018

B) 13,108

C) 14,118

D) 14,008

Answer: C

98)

$$\begin{array}{r} 50,815 \\ 3,800 \\ + 85,281 \\ \hline \end{array}$$

A) 139,996

B) 139,896

C) 140,996

D) 138,896

Answer: B

99)

$$\begin{array}{r} 45,212,823 \\ 8,447,214 \\ 891,651 \\ + 2,568,535 \\ \hline \end{array}$$

A) 65,145,082

B) 57,250,223

C) 57,108,093

D) 57,120,223

Answer: D

100)

$$\begin{array}{r} 613,568 \\ 39,991 \\ + 6,579,649 \\ \hline \end{array}$$

A) 7,232,208

B) 7,223,208

C) 6,233,208

D) 7,233,208

Answer: D

101)

$$\begin{array}{r} 3,868,158 \\ 3,025,980 \\ + 6,889,551 \\ \hline \end{array}$$

A) 13,783,679

B) 13,783,689

C) 14,783,689

D) 13,793,689

Answer: B

Solve.

102) Find the sum of 641 and 4,422.

A) 5,163

B) 5,053

C) 5,063

D) 5,064

Answer: C

103) Find the total of 99, 39, 4, 17, and 318.

A) 159

B) 473

C) 477

D) 378

Answer: C

104) What is 587 increased by 54?

A) 641

B) 631

C) 651

D) 640

Answer: A

105) What is 3,331 plus 575 plus 60?

A) 3,976

B) 3,966

C) 3,912

D) 3,866

Answer: B

Subtract.

106)

$$\begin{array}{r} 55 \\ - 14 \\ \hline \end{array}$$

A) 41
Answer: A

B) 69

C) 121

D) 33

107)

$$\begin{array}{r} 689 \\ - 113 \\ \hline \end{array}$$

A) 802
Answer: B

B) 576

C) 570

D) 476

108)

$$\begin{array}{r} 668 \\ - 32 \\ \hline \end{array}$$

A) 632
Answer: D

B) 536

C) 700

D) 636

109)

$$\begin{array}{r} 81 \\ - 35 \\ \hline \end{array}$$

A) 116
Answer: C

B) 44

C) 46

D) 56

110)

$$\begin{array}{r} 917 \\ - 495 \\ \hline \end{array}$$

A) 322
Answer: D

B) 1,412

C) 412

D) 422

111)

$$\begin{array}{r} 645 \\ - 58 \\ \hline \end{array}$$

A) 577
Answer: D

B) 703

C) 487

D) 587

112)

$$\begin{array}{r} 7,239 \\ - 975 \\ \hline \end{array}$$

A) 6,264
Answer: A

B) 6,194

C) 6,254

D) 736

113)

$$\begin{array}{r} 7,717 \\ - 2,394 \\ \hline \end{array}$$

A) 7,323
Answer: D

B) 5,315

C) 5,295

D) 5,323

114)

$$\begin{array}{r} 8,286 \\ - 4,853 \\ \hline \end{array}$$

A) 3,427
Answer: D

B) 7,433

C) 3,327

D) 3,433

115) 84,338 - 39,653

A) 44,685
Answer: A

B) 53,685

C) 44,619

D) 44,679

116) 8,010 - 3,879

A) 5,241
Answer: C

B) 6,841

C) 4,131

D) 5,869

117)

$$\begin{array}{r} 23,232 \\ - 9,585 \\ \hline \end{array}$$

A) 13,647
Answer: A

B) 13,643

C) 22,647

D) 13,583

118)

$$\begin{array}{r} 9,020 \\ - 1,999 \\ \hline \end{array}$$

A) 8,979
Answer: B

B) 7,021

C) 8,131

D) 9,931

119)

$$\begin{array}{r} 65,326 \\ - 16,761 \\ \hline \end{array}$$

A) 48,565
Answer: A

B) 54,565

C) 48,563

D) 48,523

120)

$$\begin{array}{r} 80,000 \\ - 26,877 \\ \hline \end{array}$$

A) 96,877
Answer: D

B) 66,877

C) 95,343

D) 53,123

121) $80,000 - 32,377$

A) 47,623

B) 102,377

C) 110,953

D) 52,377

Answer: A

122) $87,248 - 6,599$

A) 88,469

B) 80,349

C) 80,649

D) 84,649

Answer: C

Solve.

123) Find 5 subtracted from 42.

A) 38

B) 36

C) 37

D) 47

Answer: C

124) Find the difference of 32 and 9

A) 23

B) 33

C) 22

D) 24

Answer: A

125) Subtract 8 from 87.

A) 80

B) 79

C) 78

D) 89

Answer: B

126) Find the difference of 94 and 5.

A) 99

B) 88

C) 90

D) 89

Answer: D

127) Find 18 subtracted from 92.

A) 110

B) 70

C) 74

D) 94

Answer: C

128) Find 934 less 58.

A) 776

B) 876

C) 992

D) 868

Answer: B

129) Find 16 subtracted from 63.

A) 57

B) 41

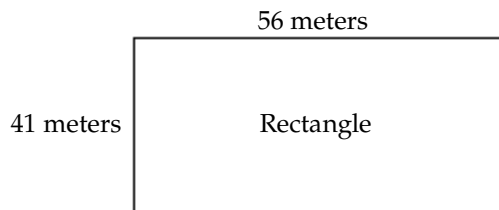
C) 47

D) 79

Answer: C

Find the perimeter.

130)



A) 153 m

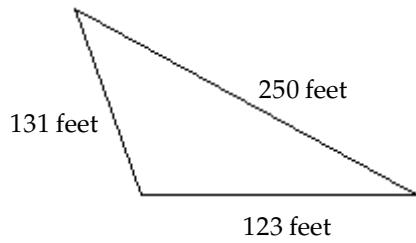
B) 194 m

C) 2,296 m

D) 97 m

Answer: B

131)



A) 494 ft

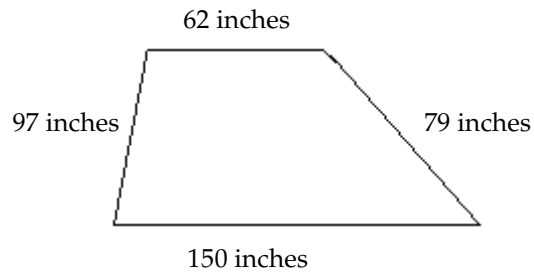
B) 381 ft

C) 504 ft

D) 31,131 ft

Answer: C

132)



A) 352 in.

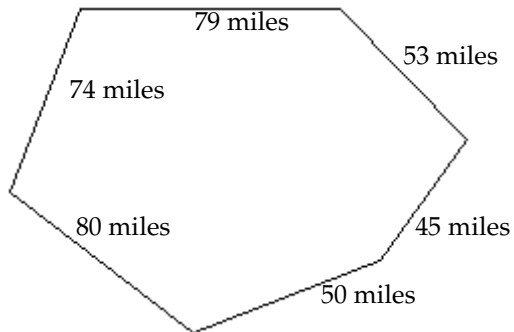
B) 282 in.

C) 326 in.

D) 388 in.

Answer: D

133)



A) 307 mi

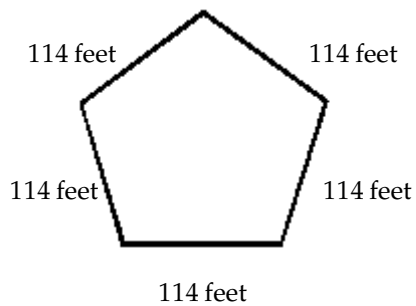
B) 460 mi

C) 401 mi

D) 381 mi

Answer: D

134)



A) 570 ft

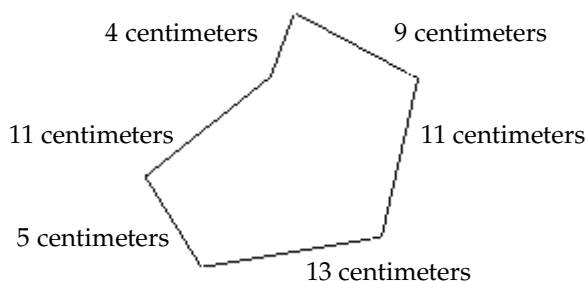
B) 12,996 ft

C) 684 ft

D) 585 ft

Answer: A

135)



A) 45 cm

B) 58 cm

C) 42 cm

D) 53 cm

Answer: D

Solve.

- 136) Lew is installing an invisible fence in his back yard which measures 118 feet by 66 feet by 84 feet by 93 feet. How many feet of wiring is needed to enclose his yard?

A) 371 ft

B) 351 ft

C) 361 ft

D) 381 ft

Answer: C

- 137) A store sold 33 lamps on Monday, 16 lamps on Tuesday, and 25 lamps on Wednesday. How many lamps did the store sell in all?

A) 74 lamps

B) 73 lamps

C) 84 lamps

D) 75 lamps

Answer: A

- 138) Last year a company had 5,847 employees. This year the number of employees increased by 1,379. How many employees does the company have now?

A) 7,126 employees

B) 7,326 employees

C) 7,226 employees

D) 7,236 employees

Answer: C

- 139) A town's population in 1976 was 184,274. By the year 2000 it had increased by 26,087. How many people lived there in 2000?

A) 210,361 people

B) 211,361 people

C) 209,361 people

D) 210,461 people

Answer: A

- 140) A store sold 39 CD players on Monday, 17 CD players on Tuesday, and 27 CD players on Wednesday. How many CD players did the store sell in all?

A) 84 CD players

B) 82 CD players

C) 93 CD players

D) 83 CD players

Answer: D

- 141) Isabelle went shopping for holiday presents for her family. She spent \$310 on Monday, \$352 on Tuesday, and \$320 on Wednesday. What is the total amount of money that she spent on gifts?

A) \$982

B) \$972

C) \$882

D) \$1,072

Answer: A

- 142) A consultant picks up a rental car that has an odometer reading of 17,742 miles on it. When he returns it, the odometer reads 18,497 miles. How many miles did he drive the rental car?

A) 5,639 mi

B) 755 mi

C) 555 mi

D) 855 mi

Answer: B

- 143) The Creekwood County school system has 4,358 high school students, 2,964 middle school students, and 4,912 elementary school students. How many students are in the Creekwood County school system in total?
 A) 12,142 students B) 12,194 students C) 12,234 students D) 12,289 students
 Answer: C
- 144) An election for student body president was held over 3 days. On the first day Carlos received 194 votes and Tina received 131 votes. On the second day Carlos received 133 votes and Tina received 287 votes. On the third day Carlos received 130 votes and Tina received 263 votes. How many votes did Tina receive?
 A) 681 votes B) 457 votes C) 550 votes D) 683 votes
 Answer: A
- 145) It is 82 miles from Franklin to Hartford. It is 76 miles from Hartford to Cayfield. Driving directly, it is 134 miles directly from Franklin to Cayfield. It is 32 miles from Cayfield to Ridgeport. If Otis drives from Franklin to Hartford, then from Hartford to Cayfield, and finally home to Franklin, how many miles does he drive?
 A) 248 mi B) 324 mi C) 292 mi D) 282 mi
 Answer: C
- 146) A stock worth \$171 per share on July 12 dropped to \$78 per share on July 31 of the same year. Find how much it lost in value from July 12th to the 31st.
 A) \$94 B) \$93 C) \$107 D) \$103
 Answer: B
- 147) Claire is reading a 401- page book. If she has just finished reading page 273, how many more pages must she read to finish the book?
 A) 128 pages B) 238 pages C) 138 pages D) 129 pages
 Answer: A
- 148) A camera that sells regularly for \$270 is discounted by \$89 in a sale. What is the sale price?
 A) \$359 B) \$181 C) \$191 D) \$89
 Answer: B
- 149) Janet has a total of \$1,903 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) \$666 B) \$1227 C) \$675 D) \$676
 Answer: D
- 150) Pat is trading her car in for a new car. The new car costs \$23,025. Her car is worth \$5,998. How much more money does she need to buy the new car?
 A) \$17,027 B) \$16,927 C) \$17,017 D) \$17,028
 Answer: A
- 151) The population of Harlowe County is 1,085,591. The population of Broselow County is 212,296. The population of Irving County is 120,275. How much greater is the population of Harlowe County than Irving County?
 A) 873,395 B) 964,316 C) 965,316 D) 873,295
 Answer: C

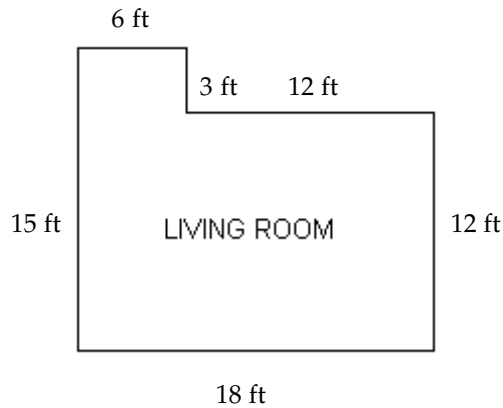
152) As part of homecoming festivities the student organizations are selling donuts. The fraternities have sold 456,123 donuts; the sororities have sold 111,112 donuts; the band members have sold 246,321 donuts; and the athletes have sold 351,056 donuts. Have they reached their goal of 1 million donuts sold? If not, how many more donuts need to be sold?

A) no; 164,612

B) yes

Answer: B

153) Sue wants to add a decorative wallpaper border to her living room. Refer to the diagram below for the dimensions of Sue's living room. How many feet of wallpaper border will she need?



A) 54 ft

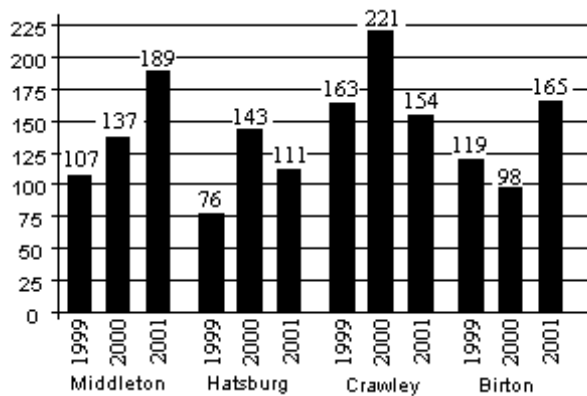
B) 60 ft

C) 66 ft

D) 63 ft

Answer: C

The bar graph shows the number of new residents in several towns during the years 1999 to 2001. Use the graph to answer the question.



154) What was the increase in the number of new residents in Birton from 2,000 to 2,001?

A) 67

B) 46

C) 36

D) 57

Answer: A

155) What was the total number of new residents in Hatsburg during the years 1999 to 2001?

A) 330

B) 417

C) 321

D) 433

Answer: A

156) What was the total number of new residents in Birton during the years 1999 to 2001?

A) 382

B) 417

C) 282

D) 330

Answer: A

- 157) What was the total number of new residents in the four towns during the year 2000?
 A) 599 B) 567 C) 465 D) 619

Answer: A

- 158) In the year 2000, how many more new residents did Crawley have than Middleton?
 A) 35 B) 32 C) 78 D) 84

Answer: D

- 159) In the year 2000, which town had the smallest number of new residents?
 A) Birton B) Crawley C) Middleton D) Hatsburg

Answer: A

- 160) How many more new residents were there in total in 2001 than in 1999?
 A) 154 B) 141 C) 172 D) 168

Answer: A

- 161) During the period 1999- 2001, how many more new residents were there in Crawley than in Hatsburg?
 A) 186 B) 199 C) 182 D) 208

Answer: D

Solve.

- 162) The table below shows the population of four states in selected years.

Population of Four States from 1960 to 2000

Source: US Census Bureau

	1960	1970	1980	1990	2000
Illinois	10,081,158	11,110,285	11,427,409	11,430,602	12,051,683
Michigan	7,823,194	8,881,826	9,262,044	9,295,297	9,679,052
Indiana	4,662,498	5,195,392	5,490,212	5,544,159	6,045,521
Minnesota	3,413,864	3,806,103	4,075,970	4,375,099	4,830,784

- How much did the population of Michigan increase from 1,960 to 1,980?
 A) 1,438,850 B) 380,218 C) 380,118 D) 1,438,950

Answer: A

- 163) The table shows the number of restaurants in five different cities.

City	Number of Restaurants
Carlsbad	419
Potters Vale	329
Little Heath	324
Edgbaston	324
Barrow	328

- How many more restaurants are there in Carlsbad than in Barrow?
 A) 747 B) 91 C) 95 D) 419

Answer: B

164) The table shows the number of restaurants in five different cities.

City	Number of Restaurants
Carlsbad	499
Potters Vale	281
Little Heath	289
Edgbaston	219
Barrow	249

What is the total number of restaurants in the first three cities listed in the table?

A) 1,537

B) 1,069

C) 1,169

D) 1,059

Answer: B

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

165) Fill in the missing digits in the problem.

$$\begin{array}{r} 2_8_1 \\ - 609_ \\ \hline 18,7_1 \end{array}$$

Answer:

$$\begin{array}{r} 24,821 \\ - 6090 \\ \hline 18,731 \end{array}$$

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

Round the whole number to the given place.

166) 549 to the nearest ten

A) 550

B) 540

C) 650

D) 560

Answer: A

167) 997 to the nearest ten

A) 1010

B) 1000

C) 990

D) 980

Answer: B

168) 2,014 to the nearest hundred

A) 1,900

B) 2,010

C) 2,100

D) 2,000

Answer: D

169) 2,689 to the nearest hundred

A) 2,600

B) 2,690

C) 2,700

D) 2,800

Answer: C

170) 78,830 to the nearest hundred

A) 78,810

B) 78,900

C) 78,700

D) 78,800

Answer: D

171) 7,272 to the nearest thousand

A) 8,000

B) 7,000

C) 7,100

D) 6,900

Answer: B

172) 20,425 to the nearest thousand

A) 21,000

B) 20,000

C) 30,000

D) 20,100

Answer: B

173) 35,860 to the nearest thousand

A) 36,000

B) 35,900

C) 40,000

D) 35,000

Answer: A

174) 595,233 to the nearest ten thousand

A) 590,000

B) 600,000

C) 595,000

D) 700,000

Answer: B

175) 96,660 to the nearest ten thousand

A) 97,000

B) 100,000

C) 96,000

D) 96,700

Answer: B

176) 35,603,477 to the nearest million

A) 35,700,000

B) 36,000,000

C) 35,000,000

D) 35,603,000

Answer: B

177) 29,997 to the nearest ten

A) 29,990

B) 29,900

C) 30,000

D) 29,000

Answer: C

178) 927,495 to the nearest hundred

A) 927,000

B) 927,500

C) 928,000

D) 927,400

Answer: B

179) 867,499 to the nearest thousand

A) 867,000

B) 867,500

C) 868,000

D) 867,400

Answer: A

180) 995 to the nearest ten

A) 1,000

B) 10,000

C) 1,090

D) 990

Answer: A

Round the following to the nearest ten, nearest hundred, and nearest thousand.

181) 2309

A) Ten 2,300

B) Ten 2,300

C) Ten 2,310

D) Ten 2,310

Hundred 2,400

Hundred 2,300

Hundred 2,300

Hundred 2,400

Thousand 3,000

Thousand 2,000

Thousand 2,000

Thousand 2,000

Answer: C

182) 5554

- | | | | | | | | |
|----------|-------|----------|-------|----------|-------|----------|-------|
| A) Ten | 5,560 | B) Ten | 5,550 | C) Ten | 5,560 | D) Ten | 5,550 |
| Hundred | 5,500 | Hundred | 5,600 | Hundred | 5,600 | Hundred | 5,500 |
| Thousand | 5,000 | Thousand | 6,000 | Thousand | 6,000 | Thousand | 6,000 |

Answer: B

183) 1482

- | | | | | | | | |
|----------|-------|----------|-------|----------|-------|----------|-------|
| A) Ten | 1,480 | B) Ten | 1,480 | C) Ten | 1,490 | D) Ten | 1,490 |
| Hundred | 1,400 | Hundred | 1,500 | Hundred | 1,400 | Hundred | 1,500 |
| Thousand | 1,000 | Thousand | 1,000 | Thousand | 2,000 | Thousand | 1,000 |

Answer: B

184) 7499

- | | | | | | | | |
|----------|-------|----------|-------|----------|-------|----------|-------|
| A) Ten | 7,490 | B) Ten | 7,500 | C) Ten | 7,500 | D) Ten | 7,490 |
| Hundred | 7,400 | Hundred | 7,500 | Hundred | 7,400 | Hundred | 7,500 |
| Thousand | 8,000 | Thousand | 7,000 | Thousand | 7,000 | Thousand | 7,000 |

Answer: B

185) 38,560

- | | | | | | | | |
|----------|--------|----------|--------|----------|--------|----------|--------|
| A) Ten | 38,560 | B) Ten | 38,570 | C) Ten | 38,560 | D) Ten | 38,570 |
| Hundred | 38,570 | Hundred | 38,600 | Hundred | 38,600 | Hundred | 38,500 |
| Thousand | 38,000 | Thousand | 40,000 | Thousand | 39,000 | Thousand | 38,000 |

Answer: C

186) 61,086

- | | | | | | | | |
|----------|--------|----------|--------|----------|--------|----------|--------|
| A) Ten | 61,080 | B) Ten | 61,090 | C) Ten | 61,080 | D) Ten | 61,090 |
| Hundred | 61,100 | Hundred | 61,100 | Hundred | 61,000 | Hundred | 61,080 |
| Thousand | 61,100 | Thousand | 61,000 | Thousand | 62,000 | Thousand | 62,000 |

Answer: B

Round the whole number to the given place.

187) In 2006, the number of students enrolled at a certain university was 87,872 . Round this number to the nearest thousand.

- | | | | |
|-----------|-----------|-----------|-----------|
| A) 87,000 | B) 90,000 | C) 87,900 | D) 88,000 |
|-----------|-----------|-----------|-----------|

Answer: D

188) In 2005, a company spent \$593,749,486 on advertising. Round the advertising figure to the nearest hundred- thousand.

- | | | | |
|----------------|----------------|----------------|----------------|
| A) 500,000,000 | B) 600,000,000 | C) 593,700,000 | D) 593,800,000 |
|----------------|----------------|----------------|----------------|

Answer: C

189) A publishing company sold 37,267,591 books in 2000. Round the number of books sold to the nearest ten- million.

- | | | | |
|---------------|---------------|---------------|---------------|
| A) 37,270,000 | B) 30,000,000 | C) 40,000,000 | D) 37,000,000 |
|---------------|---------------|---------------|---------------|

Answer: C

190) In 2005, the sales of a certain multinational corporation were \$16,853,000,000. Round this amount to the nearest billion.

- | | | | |
|---------------------|---------------------|---------------------|---------------------|
| A) \$16,000,000,000 | B) \$16,900,000,000 | C) \$20,000,000,000 | D) \$17,000,000,000 |
|---------------------|---------------------|---------------------|---------------------|

Answer: D

- 191) In 2005, the population of a certain city was 25,560,560. Round this number to the nearest million.
A) 30,000,000 B) 25,600,000 C) 26,000,000 D) 25,000,000

Answer: C

- 192) In 2005, a company spent \$493,749,714 on television advertising. Round this amount to the nearest hundred- million.
A) \$493,800,000 B) \$500,000,000 C) \$400,000,000 D) \$493,700,000

Answer: B

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

193)

$$\begin{array}{r} 95 \\ 72 \\ 36 \\ 15 \\ + 39 \\ \hline \end{array}$$

- A) 257 B) 270 C) 260 D) 300
Answer: B

194)

$$\begin{array}{r} 93 \\ - 76 \\ \hline \end{array}$$

- A) 17 B) 170 C) 10 D) 20
Answer: C

195)

$$\begin{array}{r} 54 \\ + 63 \\ \hline \end{array}$$

- A) 110 B) 117 C) 120 D) 100
Answer: A

196)

$$\begin{array}{r} 9,526 \\ - 2,193 \\ \hline \end{array}$$

- A) 7,333 B) 7,300 C) 7,330 D) 7,340
Answer: D

197)

$$\begin{array}{r} 674 \\ - 58 \\ \hline \end{array}$$

- A) 620 B) 616 C) 600 D) 610
Answer: D

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

198)

$$\begin{array}{r} 939 \\ 629 \\ 546 \\ 995 \\ + 443 \\ \hline \end{array}$$

A) 3,400

B) 3,600

C) 3,550

D) 3,552

Answer: A

199)

$$\begin{array}{r} 389 \\ - 247 \\ \hline \end{array}$$

A) 100

B) 200

C) 142

D) 600

Answer: B

200)

$$\begin{array}{r} 5,165 \\ + 1,957 \\ \hline \end{array}$$

A) 7,122

B) 7,200

C) 7,100

D) 7,000

Answer: B

201)

$$\begin{array}{r} 284 \\ 710 \\ 869 \\ 890 \\ + 786 \\ \hline \end{array}$$

A) 3,500

B) 3,539

C) 3,540

D) 3,600

Answer: D

202)

$$\begin{array}{r} 5,232 \\ 7,347 \\ + 3,109 \\ \hline \end{array}$$

A) 15,700

B) 15,600

C) 16,000

D) 18,000

Answer: B

203)

$$\begin{array}{r} 895 \\ - 548 \\ \hline \end{array}$$

A) 400

B) 1,400

C) 300

D) 347

Answer: A

204)

$$\begin{array}{r} 6,869 \\ - 1,332 \\ \hline \end{array}$$

A) 5,537

B) 5,600

C) 6,000

D) 5,500

Answer: B

Estimate the result of the calculation. Use your estimate to determine if the result appears to be correct or incorrect.

205) $810 + 691 + 202 + 585 = 2,288$

A) Incorrect. Estimate: 2,200

B) Incorrect. Estimate: 2,500

C) Correct. Estimate: 2,300

D) Incorrect. Estimate: 2,400

Answer: C

206) $180 + 829 + 875 + 882 = 2,666$

A) Incorrect. Estimate: 2,800

B) Incorrect. Estimate: 2,900

C) Incorrect. Estimate: 3,000

D) Incorrect. Estimate: 2,700

Answer: A

Solve the problem by estimating.

207) Andy wants to buy a refrigerator for \$999, a stove for \$859, and a dishwasher for \$249. Round each cost to the nearest hundred to estimate the total cost.

A) \$2,200

B) \$2,000

C) \$1,900

D) \$2,100

Answer: D

208) The Pan family took a trip and traveled 66, 265, 449, 539, 598, and 460 miles on 6 consecutive days. Round each distance to the nearest hundred to estimate the distance they traveled.

A) 2,500 miles

B) 2,300 miles

C) 2,600 miles

D) 2,400 miles

Answer: D

209) Linda scored 62, 75, 70, 98, 84, and 100 on her calculus tests. Round each score to the nearest ten to estimate her total score.

A) 470

B) 480

C) 500

D) 490

Answer: D

210) Toni's car has 79,301 miles on the odometer, while Bill's car has 38,669 miles on the odometer. Round each mileage to the nearest thousand to estimate the differences in the mileages of the two cars.

A) 40,000 mi

B) 40,600 mi

C) 40,700 mi

D) 41,000 mi

Answer: A

211) Enrollment figures at a community college showed an increase from 23,609 credit hours in 2005 to 64,409 credit hours in 2006. Round each number to the nearest thousand to estimate the increase.

A) 40,900 credit hours

B) 40,800 credit hours

C) 41,000 credit hours

D) 40,000 credit hours

Answer: D

212) Nicole can buy a motorbike for \$1,732 or a car for \$7,967. Round each price to the nearest hundred to estimate the difference in the prices of the two vehicles.

A) \$6,235

B) \$6,200

C) \$6,000

D) \$6,300

Answer: D

213) In 1999, the population of Capital City was 7,195,831 and the population of Spring City was 4,112,652.. Round each population to the nearest hundred- thousand to estimate the difference in the populations of the two cities.

A) 3,083,000

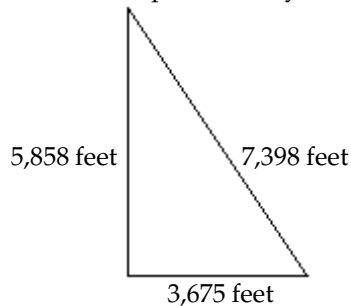
B) 3,000,000

C) 3,100,000

D) 3,200,000

Answer: C

214) Estimate the perimeter by first rounding each length to the nearest hundred.



A) 8,500 ft

B) 10,764,100 ft

C) 17,000 ft

D) 16,900 ft

Answer: C

215) A number rounded to the nearest hundred is 6,100. Determine the smallest possible number.

A) 6,051

B) 6,150

C) 6,050

D) 6,049

Answer: C

Multiply.

216) $83 \cdot 1$

A) 0

B) 83

C) 1

D) 831

Answer: B

217) $1 \cdot 21$

A) 121

B) 21

C) 0

D) 1

Answer: B

218) $45 \cdot 0$

A) 0

B) 450

C) 45

D) 1

Answer: A

219) $0 \cdot 21$

A) 1

B) 21

C) $\frac{1}{21}$

D) 0

Answer: D

220) $7 \cdot 7 \cdot 0$

A) 770

B) 0

C) 14

D) 49

Answer: B

221) $94 \cdot 0 \cdot 6$

A) 544

B) 0

C) 664

D) 564

Answer: B

Use the distributive property to rewrite the expression.

222) $9(10 + 5)$

A) $9 \cdot 10 + 9 \cdot 5$

B) $9 \cdot 10 \cdot 5$

C) $9 \cdot 10 + 5$

D) $9 + 10 + 5$

Answer: A

223) $8(1 + 2)$

A) $8 + 1 + 2$

B) $8 \cdot 1 \cdot 2$

C) $8 \cdot 1 + 8 \cdot 2$

D) $8 \cdot 1 + 2$

Answer: C

224) $31(17 + 45)$

A) $31 \cdot 17 + 31 \cdot 45$

B) $31 \cdot 62$

C) $31 \cdot 17 + 45$

D) $31 + 17 + 45$

Answer: A

Multiply.

225)

$$\begin{array}{r} 16 \\ \times 4 \\ \hline \end{array}$$

A) 64

B) 50

C) 44

D) 164

Answer: A

226)

$$\begin{array}{r} 676 \\ \times 8 \\ \hline \end{array}$$

A) 5,418

B) 5,308

C) 5,508

D) 5,408

Answer: D

227) 494×6

A) 3,064

B) 2,964

C) 2,864

D) 2,974

Answer: B

228) $9,843 \times 8$

A) 78,844

B) 78,744

C) 78,754

D) 78,644

Answer: B

229)

$$\begin{array}{r} 8,204 \\ \times 2 \\ \hline \end{array}$$

A) 16,508

B) 16,308

C) 16,408

D) 16,418

Answer: C

230)

$$\begin{array}{r} 11,473 \\ \times 9 \\ \hline \end{array}$$

A) 103,257

B) 103,357

C) 103,237

D) 103,247

Answer: A

231)

$$\begin{array}{r} 42 \\ \times 76 \\ \hline \end{array}$$

A) 3,182
Answer: D

B) 3,202

C) 3,292

D) 3,192

232)

$$\begin{array}{r} 653 \\ \times 85 \\ \hline \end{array}$$

A) 55,605
Answer: B

B) 55,505

C) 55,515

D) 55,495

233)

$$\begin{array}{r} 308 \\ \times 14 \\ \hline \end{array}$$

A) 532
Answer: D

B) 4,320

C) 4,304

D) 4,312

234)

$$\begin{array}{r} 331 \\ \times 965 \\ \hline \end{array}$$

A) 319,515
Answer: B

B) 319,415

C) 319,425

D) 319,405

235)

$$\begin{array}{r} 482 \\ \times 110 \\ \hline \end{array}$$

A) 53,020
Answer: A

B) 530,200

C) 48,200

D) 5,302

236)

$$\begin{array}{r} 2,193 \\ \times 388 \\ \hline \end{array}$$

A) 850,984
Answer: B

B) 850,884

C) 849,884

D) 860,884

237) (36)(138)(0)

A) 0
Answer: A

B) 4,958

C) 5,068

D) 4,968

238) (830)(60)

A) 49,800
Answer: A

B) 49,790

C) 49,796

D) 49,810

239) $(820)(1)(60)$
 A) 49,190 B) 49,210 C) 49,196 D) 49,200
 Answer: D

240) $1,193 \times 32$
 A) 38,176 B) 3,569 C) 35,792 D) 5,965
 Answer: A

241) 326×404
 A) 131,714 B) 131,694 C) 131,804 D) 131,704
 Answer: D

242)

$$\begin{array}{r} 1,409 \\ \times 603 \\ \hline \end{array}$$

 A) 12,681 B) 849,627 C) 88,767 D) 848,218
 Answer: B

243)

$$\begin{array}{r} 1,744 \\ \times 2,205 \\ \hline \end{array}$$

 A) 3,924,000 B) 3,845,520 C) 3,496,720 D) 3,531,600
 Answer: B

Estimate the answer by rounding as indicated.

244) Estimate the product by rounding each factor to the nearest ten.
 38×11
 A) 300 B) 400 C) 1,200 D) 800
 Answer: B

245) Estimate the product by rounding each factor to the nearest hundred.
 169×705
 A) 119,100 B) 140,000 C) 900 D) 119,145
 Answer: B

246) Estimate the product by rounding each factor to the nearest hundred.
 509×506
 A) 25,000 B) 2500 C) 250,000 D) 25,000,000
 Answer: C

247) Estimate the product by rounding each factor to the nearest hundred.
 106×599
 A) 600,000 B) 500,000 C) 50,000 D) 60,000
 Answer: D

248) Estimate the product by rounding each factor to the nearest ten.

$$345 \times 93$$

A) 32,085

B) 440

C) 32,090

D) 31,500

Answer: D

249) Estimate the product by rounding the first factor to the nearest hundred and the second factor to the nearest ten.

$$717 \times 68$$

A) 56,000

B) 42,000

C) 48,000

D) 49,000

Answer: D

250) Estimate the product by rounding each factor to the nearest thousand.

$$8,093 \times 3,636$$

A) 29,426,000

B) 29,160,000

C) 29,426,100

D) 32,000,000

Answer: D

Solve.

251) Find the product of 7 and 300.

A) 1000

B) 210

C) 2100

D) 21,000

Answer: C

252) Multiply 40 by 24.

A) 960

B) 86

C) 96

D) 860

Answer: A

253) Find 2 times 3,092.

A) 6,084

B) 6,284

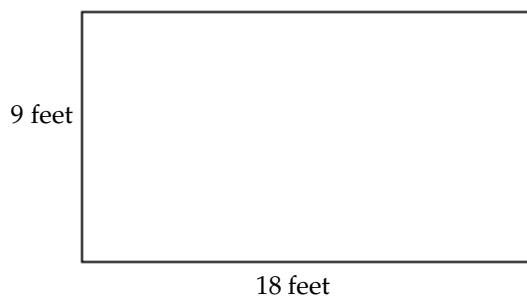
C) 6,194

D) 6,184

Answer: D

Find the area of the rectangle.

254)



A) 162 sq ft

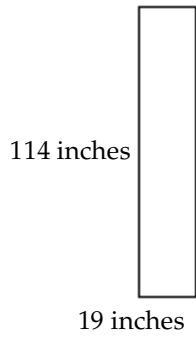
B) 324 sq ft

C) 243 sq ft

D) 81 sq ft

Answer: A

255)



A) 2,166 sq in.

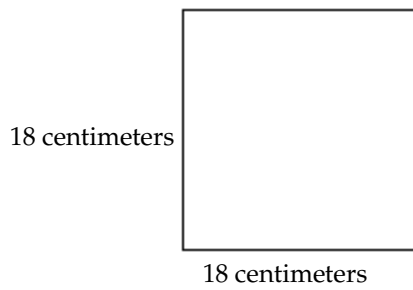
B) 133 sq in.

C) 2,156 sq in.

D) 1,805 sq in.

Answer: A

256)



A) 319 sq cm

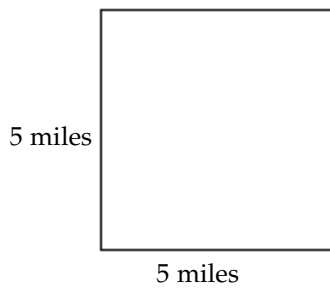
B) 648 sq cm

C) 72 sq cm

D) 324 sq cm

Answer: D

257)



A) 21 sq mi

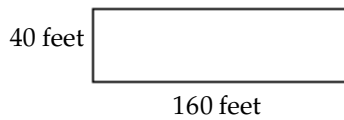
B) 28 sq mi

C) 20 sq mi

D) 25 sq mi

Answer: D

258)



A) 400 sq ft

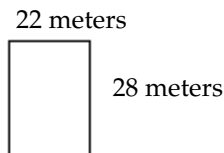
B) 6,390 sq ft

C) 6,400 sq ft

D) 6,410 sq ft

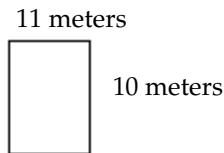
Answer: C

259)



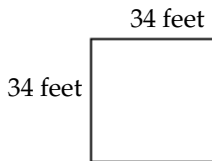
- A) 50 sq m B) 100 sq m C) 1,232 sq m D) 616 sq m
- Answer: D

260)



- A) 110 sq m B) 220 sq m C) 21 sq m D) 42 sq m
- Answer: A

261)



- A) 2,312 sq ft B) 136 sq ft C) 1,156 sq ft D) 68 sq ft
- Answer: C

Solve.

262) The textbook for a history class costs \$57. There are 30 students in the class. Find the total cost of the history books for the class.

- A) \$1,680 B) \$87 C) \$1,710 D) \$1,653
- Answer: C

263) The seats in the lecture hall are arranged in 18 rows with 7 seats in each row. Find how many seats are in this room.

- A) 136 seats B) 126 seats C) 133 seats D) 119 seats
- Answer: B

264) A case of candy bars has 2 layers of candy bars. In each layer are 6 rows with 13 candy bars in each row. Find how many candy bars are in a case.

- A) 155 candy bars B) 166 candy bars C) 146 candy bars D) 156 candy bars
- Answer: D

265) An apartment complex has 9 apartment buildings. Each building has 8 floors with 4 apartments per floor. Find how many apartments are in this complex.

- A) 298 apartments B) 288 apartments C) 21 apartments D) 278 apartments
- Answer: B

- 266) A rectangular plot of land measure 50 feet by 130 feet. Find its area.
 A) 6,500 sq ft B) 360 sq ft C) 180 sq ft D) 650 sq ft
 Answer: A
- 267) The floor plan of a building is a rectangle which measures 180 meters by 45 meters. Find the floor area of the building.
 A) 8,100 sq m B) 450 sq m C) 8,090 sq m D) 8,110 sq m
 Answer: A
- 268) A mural on the wall of a building is a rectangle which measures 774 in. by 110 in. Find the area of the mural.
 A) 8,514 sq in. B) 77,400 sq in. C) 851,400 sq in. D) 85,140 sq in.
 Answer: D
- 269) In a distant solar system the diameter of planet A is 9 times as great as the diameter of planet B. The diameter of planet B is 757 miles. Find the diameter of planet A.
 A) 6,713 mi B) 6,803 mi C) 6,813 mi D) 6,804 mi
 Answer: C
- 270) A company rents a mid- size car at \$288 per month for twelve months. What is the cost for the car rental during this time?
 A) \$3,488 B) \$3,456 C) \$3,405 D) \$300
 Answer: B
- 271) There are 81 puppies in a room, with an assortment of black and white ears and paws. 20 have totally black ears and 3 white paws, 16 puppies have 1 black ear and 2 white paws, and 45 have no black ears and 1 white paw. How many black paws are in the room?
 A) 140 B) 137 C) 186 D) 187
 Answer: D
- 272) During the recent Homecoming football game, State U. scored the following: 6 six- point touchdowns, 2 extra points, 2 three- point field goals, and 1 two- point safety. What was State U.'s final score?
 A) 20 points B) 12 points C) 46 points D) 21 points
 Answer: C
- 273) A spreadsheet is a rectangular array containing 28 rows and 20 entries in each row. How many entries does the spreadsheet contain?
 A) 15,680 entries B) 5600 entries C) 560 entries D) 532 entries
 Answer: C
- 274) Mark's typing speed is 60 words per minute. How many words can he type in 20 minutes?
 A) 1,200 words B) 80 words C) 1,100 words D) 1,210 words
 Answer: A
- 275) One packet of peanuts has 18 grams of fat. How many grams of fat are in 8 packets of peanuts?
 A) 152 g B) 136 g C) 154 g D) 144 g
 Answer: D
- 276) One bag of Alice's favorite cookies contains 323 calories. How many calories are in 3 bags of cookies?
 A) 2124 cal B) 900 cal C) 969 cal D) 960 cal
 Answer: C

- 277) Tickets for a bluegrass music festival cost \$30 for an adult, \$16 for seniors, \$10 for students, and \$8 for children under 12. The bluegrass society in the town of Puddington is providing a bus to take a group to the festival. Use the following table to find the total cost of the tickets for this group. The first row has been filled in for you.

Person	Number of Persons	Cost per Person	Cost per Category
Adult	12	\$30	\$360
Senior	6	\$16	
Student	21	\$10	
Child under 12	9	\$8	

- A) \$64 B) \$748 C) \$718 D) \$738

Answer: D

- 278) Fill in the missing digits in the problem.

$$\begin{array}{r} 7__ \\ \times __8 \\ \hline 592 \\ \underline{2,220} \\ 2,812 \end{array}$$

- A) 8, 6 B) 1, 2
C) 4, 3 D) cannot be determined

Answer: C

Find the quotient.

279) $\frac{18}{2}$

- A) 9 B) 8 R 1 C) 10 D) 8 R 2

Answer: A

280) $\frac{35}{7}$

- A) 6 B) 4 R 7 C) 4 R 6 D) 5

Answer: D

281) $40 \div 5$

- A) 7 R 4 B) 9 C) 7 R 5 D) 8

Answer: D

282) $12 \div 4$

- A) 2 R 4 B) 2 R 3 C) 4 D) 3

Answer: D

283) $\frac{6}{0}$

- A) 6 B) 1 C) 0 D) undefined

Answer: D

284) $\frac{0}{5}$

A) 1

B) 0

C) 5

D) undefined

Answer: B

285) $9 \div 1$

A) 0

B) 1

C) 9

D) undefined

Answer: C

286) $22 \div 1$

A) 1

B) $\frac{1}{22}$

C) 22

D) undefined

Answer: C

287) $28 \div 0$

A) $\frac{1}{28}$

B) 28

C) 0

D) undefined

Answer: D

288) $30 \div 30$

A) 30

B) 0

C) 1

D) undefined

Answer: C

289) $0 \div 74$

A) 0

B) 74

C) 1

D) undefined

Answer: A

Divide.

290) $4 \overline{)36}$

A) 9

B) 8 R 4

C) 10

D) 8 R 3

Answer: A

291) $2 \overline{)12}$

A) 5 R 1

B) 5 R 2

C) 6

D) 7

Answer: C

292) $6 \overline{)348}$

A) 56

B) 61

C) 60

D) 58

Answer: D

293) $4 \overline{)552}$

A) 136

B) 140

C) 138

D) 141

Answer: C

294) $5 \overline{)6,255}$

A) 1,249 R 1

B) 1,251 R 4

C) 1,251

D) 1,249

Answer: C

- 295) $26 \overline{)702}$
 A) 28 R 16 B) 28 R 5 C) 27 D) 27 R 18
 Answer: C
- 296) $9,699 \div 53$
 A) 184 R 43 B) 184 C) 183 D) 183 R 44
 Answer: C
- 297) $63 \overline{)82,467}$
 A) 1,319 R 49 B) 1,309 C) 1,299 D) 1,314 R 41
 Answer: B
- 298) $\frac{35,298}{53}$
 A) 656 B) 666 C) 676 R 20 D) 671 R 12
 Answer: B
- 299) $264 \div 7$
 A) 37 B) 37 R 6 C) 37 R 5 D) 42
 Answer: C
- 300) $3,944 \div 6$
 A) 657 R 5 B) 657 R 2 C) 657 D) 659
 Answer: B
- 301) $6 \overline{)1,617}$
 A) 269 R 3 B) 269 R 2 C) 268 R 9 D) 269
 Answer: A
- 302) $1,701 \div 6$
 A) 283 B) 283 R 2 C) 282 R 9 D) 283 R 3
 Answer: D
- 303) $114 \div 18$
 A) 6 R 6 B) 5 R 5 C) 7 R 6 D) 6 R 7
 Answer: A
- 304) $332 \div 27$
 A) 11 R 18 B) 12 R 8 C) 10 R 7 D) 12
 Answer: B
- 305) $1,501 \div 19$
 A) 80 R 9 B) 79 C) 80 D) 79 R 10
 Answer: B
- 306) $45 \overline{)17,505}$
 A) 389 B) 394 R 24 C) 379 D) 399 R 32
 Answer: A

307) $\frac{22,760}{40}$

A) 574 R 10

B) 559

C) 579 R 18

D) 569

Answer: D

308) $7,311 \div 16$

A) 15

B) 456 R 15

C) 456 R 14

D) 456

Answer: B

309) $\frac{5,544}{154}$

A) 34

B) 34 R 27

C) 36

D) 36 R 5

Answer: C

310) $\frac{35,208}{216}$

A) 1,630

B) 163

C) 173

D) 156

Answer: B

311) $7,497 \div 48$

A) 159 R 40

B) 159 R 5

C) 156

D) 156 R 9

Answer: D

312) $58,315 \div 500$

A) 315

B) 116

C) 116 R 235

D) 116 R 315

Answer: D

313) $239,964 \div 490$

A) 489 R 354

B) 489 R 304

C) 489

D) 354

Answer: A

314) $349 \overline{)188,460}$

A) 5,400

B) 539

C) 540

D) 541

Answer: C

315) $56,536 \div 641$

A) 93 R 326

B) 88 R 28

C) 88 R 128

D) 88 R 129

Answer: C

316) $817 \overline{)676,267}$

A) 827 R 608

B) 608

C) 827

D) 827 R 581

Answer: A

Solve.

317) Find the quotient of 229 and 7.

A) 32

B) 37

C) 32 R 5

D) 32 R 6

Answer: C

318) Find 204 divided by 7.

A) 29 R 6

B) 30

C) 29

D) 29 R 1

Answer: D

319) Find the quotient of 628 and 17.

A) 36

B) 36 R 16

C) 35 R 8

D) 34 R 7

Answer: B

320) Amy teaches Chinese lessons for \$45 per student for a 6- week session. From one group of students, she collects \$1,395. Find how many students are in the group.

A) 31 students

B) 35 students

C) 21 students

D) 33 students

Answer: A

321) One ticket won a prize of \$8,502,000. The winning ticket was purchased by 26 people who had pooled their money. Find how many dollars each person receives if they each receive an equal share.

A) \$326,000

B) \$327,000

C) \$32,700

D) \$32,800

Answer: B

322) In a distant galaxy the gravity of planet A is 216 times as strong as the gravity of planet B, so objects on planet A weigh 216 times as much as they weigh on planet B. If the object weighs 31,320 pounds on planet A, how much does it weigh on planet B?

A) 1,450 lb

B) 138 lb

C) 145 lb

D) 155 lb

Answer: C

323) Ms. Losch has a piece of rope 195 feet long that she cuts into pieces for an experiment in her first- grade class. Each piece of rope is to be 8 feet long. How many 8 foot long pieces of rope can she cut from the original piece of rope?

A) 25 pieces of rope

B) 3 pieces of rope

C) 24 pieces of rope

D) 27 pieces of rope

Answer: C

324) A dairy produces 770,000 quarts of milk each day. There are 4 quarts in a gallon. How many gallons of milk are produced each day?

A) 19,250 gal

B) 1,925,000 gal

C) 192,500 gal

D) 3,080,000 gal

Answer: C

325) Jim and Tammi ran a distance of 15,840 feet. A mile is 5280 ft. How many miles did they run?

A) 3 mi 2640 ft

B) 6 mi

C) 3 mi

D) 4 mi

Answer: C

326) There is a bridge over a certain highway every 8 miles. The first bridge is at the beginning of a 227- mile stretch of highway. Find how many bridges there are over 227 miles of the highway.

A) 28 bridges

B) 31 bridges

C) 29 bridges

D) 25 bridges

Answer: C

327) Wyatt wishes to pay off a car loan of \$6,912 in 24 months. How large will his monthly payment be?

A) \$288

B) \$272

C) \$3,456

D) \$280

Answer: A

328) 365 chocolates are to be packed into boxes each of which will contain 11 chocolates. How many boxes of chocolates will there be? How many chocolates will be left over?

A) 33 boxes; 2 chocolates left over

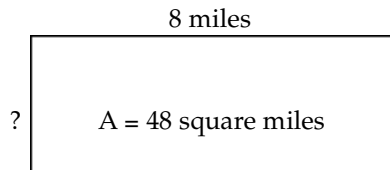
B) 32 boxes; 3 chocolates left over

C) 32 boxes; 2 chocolates left over

D) 33 boxes; no chocolates left over

Answer: A

329) If the area of a rectangle is 48 square miles and its length is 8 miles, what is its width?



A) 6 mi

B) $\frac{32}{3}$ mi

C) 8 mi

D) 384 mi

Answer: A

Find the average of the list of numbers.

330) 45, 31, 14, 9, 38, 13

A) 26

B) 25

C) 23

D) 31

Answer: B

331) 16, 20, 17, 21, 48, 15, 17

A) 32

B) 21

C) 22

D) 17

Answer: C

332) 381, 807, 772, 828

A) 697

B) 747

C) 597

D) 721

Answer: A

333) 193, 152, 174, 181, 190

A) 188

B) 181

C) 178

D) 177

Answer: C

334) 63, 57, 49, 53, 63

A) 56

B) 49

C) 63

D) 57

Answer: D

Solve the problem.

- 335) The following table shows the amount of income tax paid in 2005 by four people selected at random from a certain town.

Bill	\$870
Jill	\$7,000
Sue	\$2,200
John	\$5,650

Find the average amount of income tax paid in 2005 by the two women.

A) \$3,260.00

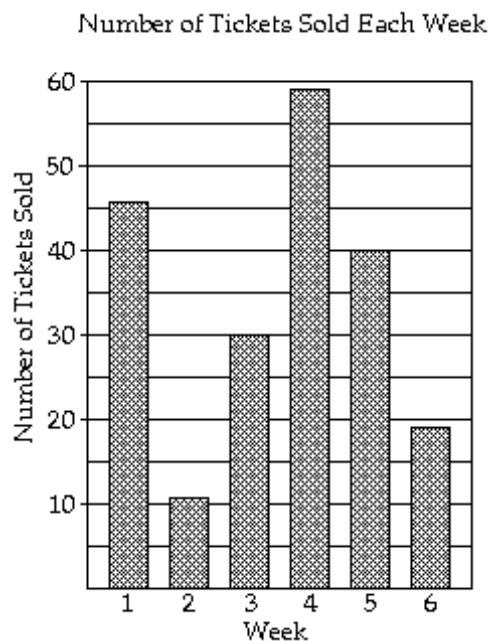
B) \$4,600

C) \$3,930.00

D) \$9,200

Answer: B

- 336) The bar graph shows the number of tickets sold each week by the garden club for their annual flower show. What was the average number of tickets sold during weeks 3, 4, and 5?



A) 42

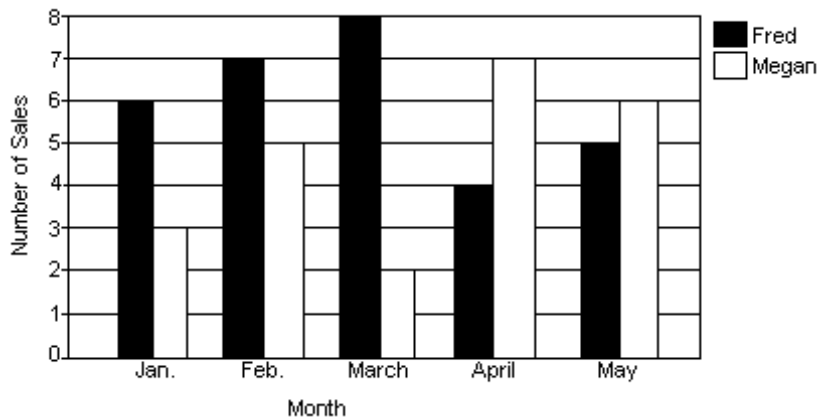
B) 129

C) 44

D) 43

Answer: D

- 337) The double-bar graph below shows the number of sales made by Fred and Megan from January through May. Find the average number of sales made by Fred for the 5-month period.



A) 8

B) 5

C) 4

D) 6

Answer: D

Write using exponential notation.

338) $9 \cdot 9$

A) 9^3

B) 9^2

C) $2 \cdot 9$

D) 2^9

Answer: B

339) $2 \cdot 2 \cdot 2$

A) $3 \cdot 2$

B) 2^3

C) 3^2

D) 2^1

Answer: B

340) $9 \cdot 9 \cdot 9 \cdot 9$

A) 9^4

B) 4^9

C) 36

D) 9^2

Answer: A

341) $8 \cdot 8 \cdot 8 \cdot 8 \cdot 8$

A) 8^0

B) 8^5

C) $5 \cdot 8$

D) 5^8

Answer: B

342) $19 \cdot 19 \cdot 19 \cdot 19$

A) 4^{19}

B) 19^4

C) $4 \cdot 19$

D) 19^1

Answer: B

343) $10 \cdot 10 \cdot 10 \cdot 10 \cdot 10$

A) 10^5

B) $5 \cdot 5^{10}$

C) $5 \cdot 10$

D) 5^{10}

Answer: A

344) $5 \cdot 5 \cdot 2 \cdot 2 \cdot 2 \cdot 2$

A) 10^6

B) $5^2 \cdot 2^4$

C) $5 \cdot 2^6$

D) $2^5 \cdot 4^2$

Answer: B

345) $7 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$

A) $(7 \cdot 2)^5$

B) $1^7 \cdot 5^2$

C) 14^5

D) $7 \cdot 2^5$

Answer: D

346) $7 \cdot 7 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 2$

A) $7 \cdot 5 \cdot 2^7$

B) $2^7 \cdot 4^5 \cdot 1^2$

C) $(7 \cdot 5 \cdot 2)^7$

D) $7^2 \cdot 5^4 \cdot 2$

Answer: D

347) $4 \cdot 4 \cdot 4 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 7$

A) $4 \cdot 6 \cdot 7^{10}$

B) $3^4 \cdot 6^6 \cdot 1^7$

C) $(4 \cdot 6 \cdot 7)^{10}$

D) $4^3 \cdot 6^6 \cdot 7$

Answer: D

Evaluate.

348) 5^2

A) 36

B) 32

C) 25

D) 10

Answer: C

349) 12^2

A) 25

B) 145

C) 144

D) 24

Answer: C

350) 1^7

A) 17

B) 1

C) 7

D) undefined

Answer: B

351) 4^1

A) 1

B) 4

C) 41

D) undefined

Answer: B

352) 3^3

A) 9

B) 10

C) 27

D) 28

Answer: C

353) 6^3

A) 216

B) 729

C) 125

D) 18

Answer: A

354) 3^7

A) 21

B) 2,187

C) 6,561

D) 343

Answer: B

355) 7^4

A) 28

B) 343

C) 16,384

D) 2,401

Answer: D

356) 6^5
 A) 46,656 B) 30 C) 7,776 D) 15,625
 Answer: C

357) $5 \cdot 3^3$
 A) 135 B) 32 C) 45 D) 3,375
 Answer: A

358) $6 \cdot 3^2$
 A) 36 B) 54 C) 324 D) 48
 Answer: B

Simplify.

359) $2 \cdot 8 - 3$
 A) 10 B) 48 C) 13 D) 19
 Answer: C

360) $28 + 6 \cdot 5$
 A) 308 B) -2 C) 170 D) 58
 Answer: D

361) $38 - 7 \cdot 5$
 A) 3 B) 76 C) 73 D) 155
 Answer: A

362) $240 \div 8 - 3$
 A) 27 B) 235 C) 229 D) 48
 Answer: A

363) $\frac{240}{5} - 4$
 A) 44 B) 240 C) 239 D) 231
 Answer: A

364) $19 \cdot 3 + 6 \cdot 17$
 A) 159 B) 1,071 C) 2,907 D) 1,995
 Answer: A

365) $2 + 4 \cdot 8 - 7$
 A) 41 B) 7 C) 0 D) 27
 Answer: D

366) $10 + 4 \div 2 \cdot 4 - 3$
 A) 25 B) 15 C) 21 D) 53
 Answer: B

367) $0 \div 3 + 9 \cdot 2$
 A) 24 B) 18 C) 21 D) undefined
 Answer: B

- 368) $8^2 - 4 \cdot 9$
 A) 540 B) 144 C) 28 D) 288
 Answer: C
- 369) $48 \div 0 + 12$
 A) 4 B) 60 C) 12 D) undefined
 Answer: D
- 370) $8^2 \div 8 \times 6 + 2$
 A) 32 B) 46 C) 50 D) 96
 Answer: C
- 371) $(12 + 5) \cdot (11 - 8)$
 A) 51 B) 27 C) 41 D) 59
 Answer: A
- 372) $\frac{8 + 32 \div 2}{2^2}$
 A) 18 B) 5 C) 12 D) 6
 Answer: D
- 373) $(60 + 6^2) \div 3 \cdot 2^2$
 A) 108 B) 8 C) 128 D) 63
 Answer: C
- 374) $[128 - (11 - 7)] - 2^4$
 A) 116 B) 94 C) 108 D) 140
 Answer: C
- 375) $14 - (6 \div 2) + 5 \cdot 3^4$
 A) 416 B) 729 C) 409 D) 1,296
 Answer: A
- 376) $(7 + 2) \cdot 4 + [36 \div (6 \div 6)]$
 A) 16 B) 37 C) 51 D) 72
 Answer: D
- 377) $33 \div [2^3 + (73 - 6) - 4^3] + 7 \cdot 4$
 A) 61 B) 160 C) 31 D) 40
 Answer: C
- 378) $\frac{7^2 - 2^3 + 134}{100 \div 4 \cdot 5 \cdot 1 \div 5}$
 A) 175 B) 35 C) 7 D) 142
 Answer: C

379) $[31 - (4 + 6) \div 2] - [1 + 9 \div 3]$

A) 22

B) 29

C) 17

D) 19

Answer: A

380) $(7 + 3)[3 + (7 + 7)]$

A) 1,092

B) 357

C) 170

D) 52

Answer: C

381) $8 \cdot [8^2 + 7 \cdot (8 + 3)]$

A) 6,248

B) 1,128

C) 984

D) 141

Answer: B

382) $5[6 + 6(9^2)]$

A) 18,000

B) 90,000

C) 2,460

D) 14,610

Answer: C

383) $\frac{143 + 7}{3^2 - 4}$

A) 28

B) 45

C) 30

D) 75

Answer: C

384) $\frac{42(16 - 13) - 6}{3^2 - 3}$

A) 22

B) 21

C) 40

D) 20

Answer: D

385) $24 - [10 + (9 - 5)] - (3 - 1)^3$

A) 18

B) 8

C) 26

D) 2

Answer: D

386) $3 \cdot (2 + 3)^2 - 3 \cdot (6 - 4)^2$

A) 63

B) 69

C) 288

D) 189

Answer: A

387) $380 - 2^3 \cdot 24 \div (4 \cdot 3 - 2 \cdot 2)$

A) 1,116

B) 356

C) 740

D) 360

Answer: B

388) $\{[57 - 2 \cdot 5] - [69 \div (1 + 2)]\} \cdot 6$

A) 144

B) 180

C) 132

D) 210

Answer: A

389) $3[(4 - 2)^2 + (22 - 19)^2] + 13$

A) 3

B) 26

C) 78

D) 52

Answer: D

390) $(55 - 18) \cdot [(80 + 20 \div 5) - (6 \cdot 6 - 1 \cdot 1)]$

A) 1,813

B) 1,913

C) 1,870

D) 1,777

Answer: A

391) $2 \cdot \{(300 - 70 \div 5) - [3 \cdot 22 - (8 - 2 \cdot 3)]\}$

A) 444

B) 2,220

C) 394

D) - 1,056

Answer: A

Insert parentheses in order to make the statement true.

392) $3 \cdot 8 - 4 = 12$

A) $(3 \cdot 8) - 4 = 12$

B) $(3)(8)(-4) = 12$

C) $3 \cdot 8 (-4) = 12$

D) $3 \cdot (8 - 4) = 12$

Answer: D

393) $3 + 3 \cdot 9 - 3 = 36$

A) $(3 + 3) \cdot 9 - 3 = 36$

B) $3 + (3 \cdot 9) - 3 = 36$

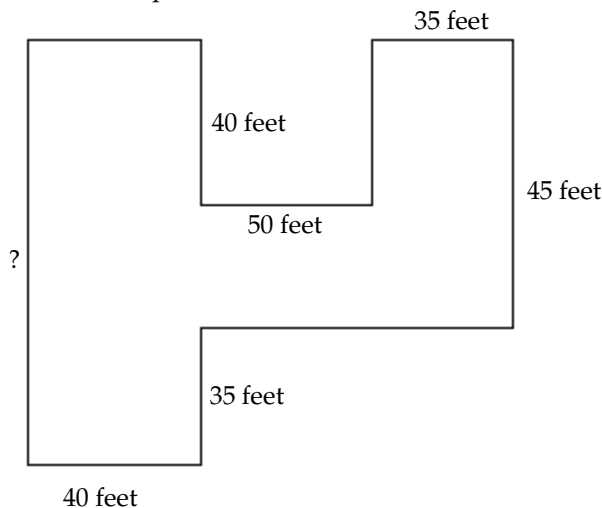
C) $(3 + 3) \cdot (9 - 3) = 36$

D) $3 + 3 \cdot (9 - 3) = 36$

Answer: C

Solve.

- 394) Seven swimming pools for a major hotel chain have the shape and dimensions shown below. One supplier is providing a tile border for all of the pools. He needs to know the perimeter of all seven pools to get a cost estimate. Find the total perimeter.



A) 490 ft

B) 495 ft

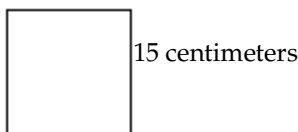
C) 3,960 ft

D) 3,430 ft

Answer: D

Find the area of the square.

395)



A) 220 sq cm

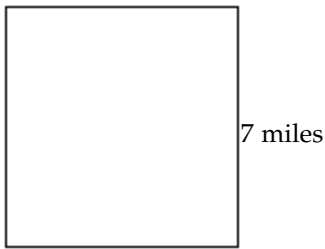
B) 450 sq cm

C) 60 sq cm

D) 225 sq cm

Answer: D

396)



A) 28 sq mi

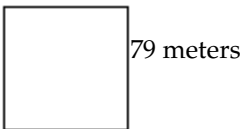
B) 49 sq mi

C) 45 sq mi

D) 52 sq mi

Answer: B

397)



A) 316 sq m

B) 158 sq m

C) 12,482 sq m

D) 6,241 sq m

Answer: D

Evaluate the expression for the given replacement values.

398) $x + y$ for $x = 52, y = 41$

A) 66

B) 93

C) 39

D) 75

Answer: B

399) $x \div y$ for $x = 324, y = 6$

A) 57

B) 52

C) 56

D) 54

Answer: D

400) $x \div y$ for $x = 408, y = 0$

A) 0

B) $\frac{1}{408}$

C) 408

D) undefined

Answer: D

401) $x \cdot y$ for $x = 4, y = 64$

A) 248

B) 246

C) 356

D) 256

Answer: D

402) $x - y + z$ for $x = 25, y = 9, z = 1$

A) 17

B) 18

C) 15

D) 35

Answer: A

403) $x - 4yz$ for $x = 77, y = 3, z = 2$

A) 53

B) 68

C) 438

D) 130

Answer: A

404) $x - (y + z)$ for $x = 23, y = 6, z = 4$

A) 13

B) 33

C) 21

D) 22

Answer: A

405) $22 - (y - z)$ for $y = 10, z = 2$

A) 34

B) 15

C) 10

D) 14

Answer: D

406) $2x + 5$ for $x = 4$

A) 3

B) 16

C) 13

D) 7

Answer: C

407) $5x + 2y$ for $x = 4$ and $y = 8$

A) 7

B) 36

C) 21

D) 22

Answer: B

408) $8x - 3y$ for $x = 5$ and $y = 4$

A) 28

B) 37

C) 36

D) 52

Answer: A

409) $x^2 - 3y$ for $x = 8, y = 2$

A) 22

B) 58

C) 10

D) 70

Answer: B

410) $9x^2 + 8x$ for $x = 4$

A) 176

B) 68

C) 104

D) 112

Answer: A

411) $\frac{5x}{y}$ for $x = 54, y = 9$

A) 240

B) 45

C) 225

D) 30

Answer: D

412) $\frac{x+y}{2}$ for $x = 12, y = 10$

A) 17

B) 22

C) 11

D) 16

Answer: C

413) $\frac{9x + 15y}{11}$ for $x = 10, y = 5$

A) 15

B) -1

C) 18

D) 165

Answer: A

414) $\frac{6x}{3} + \frac{6y}{3}$ for $x = 6, y = 21$

A) 19

B) 54

C) 138

D) 18

Answer: B

415) $\frac{x}{6} + \frac{y}{6}$ for $x = 42, y = 12$

A) 44

B) 19

C) 54

D) 9

Answer: D

416) $(x + 4y)^2$ for $x = 2, y = 3$
 A) 14 B) 36 C) 28 D) 196
 Answer: D

417) $10x^2 + 5y$ for $x = 7, y = 4$
 A) 195 B) 4,920 C) 2,160 D) 510
 Answer: D

418) $3xy^2 - 2$ for $x = 4, y = 3$
 A) 430 B) 106 C) 70 D) 1,294
 Answer: B

419) $5y(3z - x)$ for $x = 8, y = 3, z = 6$
 A) 262 B) 150 C) 50 D) 90
 Answer: B

420) $\frac{12xy}{z}$ for $x = 5, y = 6, z = 3$
 A) 360 B) 20 C) 120 D) 357
 Answer: C

421) $\frac{12x - 16}{y}$ for $x = 6, y = 4$
 A) 68 B) 6 C) 14 D) 2
 Answer: C

422) $x^5 - (y - z)$ for $x = 2, y = 3, z = 2$
 A) 9 B) 31 C) 5 D) 27
 Answer: B

423) $(7x - yz)^4$ for $x = 2, y = 6, z = 3$
 A) 648 B) -16 C) 331,776 D) 256
 Answer: D

Solve the problem.

424) The expression $\frac{9C}{5} + 32$ gives the equivalent degrees Fahrenheit for C degrees Celsius. Evaluate this expression when $C = 95$ to find the equivalent temperature in degrees Fahrenheit.
 A) 202 B) 222 C) 184 D) 203
 Answer: D

Decide whether the given number is a solution of the given equation.

425) Is 3 a solution of $p + 8 = 11$?
 A) yes B) no
 Answer: A

426) Is 13 a solution of $p - 7 = 6$?

A) yes

B) no

Answer: A

427) Is 4 a solution of $2m + 5 = 15$?

A) yes

B) no

Answer: B

428) Is 16 a solution of $5n = 75$?

A) yes

B) no

Answer: B

429) Is 7 a solution of $8x - 4 = 52$?

A) yes

B) no

Answer: A

430) Is 6 a solution of $5x - 9 = 33 - 2x$?

A) yes

B) no

Answer: A

431) Is 2 a solution of $3(r + 7) = 13$?

A) yes

B) no

Answer: B

Determine which numbers in the set are solutions to the equation.

432) $x + 3 = 11$; {7, 8, 9}

A) 9

B) 7

C) 8

D) none of them

Answer: C

433) $28 - n = 21$; {6, 7, 8}

A) 6

B) 7

C) 8

D) none of them

Answer: B

434) $9x = 27$; {3, 4, 243}

A) 243

B) 4

C) 3

D) none of them

Answer: C

435) $3 + (y + 4) = 10$; {3, 4, 5}

A) 3 and 5

B) 3

C) 4

D) 5

Answer: B

436) $7n + n = 56$; {7, 8, 448}

A) 7

B) 8

C) 448

D) 7 and 8

Answer: A

437) $2r + 6 = 24$; {6, 9, 16}

A) 6

B) 9

C) 16

D) none of them

Answer: B

438) $8n - 4 = 68$; {9, 12, 68}

A) 68

B) 9

C) 12

D) none of them

Answer: B

Write the phrase as a variable expression. Use x to represent "a number."

439) The total of 130 and a number

A) 130

B) $130x$

C) $130 - x$

D) $130 + x$

Answer: D

440) The sum of a number and 104

A) $104x$

B) 104

C) $x + 104$

D) $x - 104$

Answer: C

441) 7 times a number

A) $\frac{7}{x}$

B) $7 + x$

C) $7 - x$

D) $7x$

Answer: D

442) 82 less a number

A) $x - 82$

B) $\frac{82}{x}$

C) $82 - x$

D) $x + 82$

Answer: C

443) The product of 2 and a number

A) $2 + x$

B) $2 - x$

C) $\frac{2}{x}$

D) $2x$

Answer: D

444) 62 subtracted from a number

A) $62x$

B) $x - 62$

C) $62 - x$

D) 62

Answer: B

445) The difference of a number and 35

A) $35 - x$

B) $35x$

C) 35

D) $x - 35$

Answer: D

446) 38 decreased by a number

A) $x - 38$

B) $38 - x$

C) $38 + x$

D) $\frac{38}{x}$

Answer: B

447) A number divided by 21

A) $x - 21$

B) $21x$

C) $\frac{x}{21}$

D) $\frac{21}{x}$

Answer: C

448) The quotient of 78 and a number

A) $78 - x$

B) $\frac{78}{x}$

C) $\frac{x}{78}$

D) $x - 78$

Answer: B

449) 4 decreased by 8 times a number

A) $8x - 4$

B) $8 - 4x$

C) $4x - 8$

D) $4 - 8x$

Answer: D

450) 8 less than 6 times a number

A) $6 - 8x$

B) $6x - 8$

C) $8 - 6x$

D) $8x - 6$

Answer: B

451) 7 more than 9 times a number

A) $9x + 7$

B) $7x + 9$

C) $16x$

D) $9(7 + x)$

Answer: A

452) The quotient of a number and 4, decreased by 8

A) $\frac{4}{x} - 8$

B) $\frac{4}{x - 8}$

C) $\frac{x}{4} - 8$

D) $\frac{x - 8}{4}$

Answer: C

Fill in the blank with one of the words or phrases listed below.

difference
place value
sum
solution

factor
whole numbers
set
quotient

perimeter
equation
addend
subtrahend

dividend
divisor
exponent
product

minuend
variable
expression
digits area

453) The _____ are 0, 1, 2, 3, . . .

A) digits

B) factor

C) whole numbers

D) place value

Answer: C

454) The _____ of a polygon is its distance around or the sum of the lengths of its sides.

A) place value

B) perimeter

C) product

D) area

Answer: B

455) The position of each digit in a number determines its _____.

A) divisor

B) place value

C) digits

D) factor

Answer: B

456) A(n) _____ is a shorthand notation for repeated multiplication of the same factor.

A) area

B) equation

C) expression

D) exponent

Answer: D

457) To find the _____ of a rectangle, multiply length times width.

A) area

B) perimeter

C) product

D) solution

Answer: A

458) The _____ used to write numbers are 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9.

- A) difference B) dividend C) divisor D) digits

Answer: D

459) A letter used to represent a number is called a(n) _____.

- A) solution B) addend C) place value D) variable

Answer: D

460) A(n) _____ can be written in the form "expression = expression."

- A) area B) exponent C) equation D) addend

Answer: C

461) A combination of operations on variables and numbers is called a(n) _____.

- A) equation B) exponent C) addend D) expression

Answer: D

462) A(n) _____ of an equation is a value of the variable that makes the equation a true statement.

- A) set B) solution C) expression D) sum

Answer: B

463) A collection of numbers (or objects) enclosed by braces is called a(n) _____.

- A) solution B) set C) quotient D) subtrahend

Answer: B

464) Use the facts below.

$$2 \cdot 3 = 6 \qquad 4 + 17 = 21 \qquad 20 - 9 = 11 \qquad \begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 21 above is called the _____.

- A) sum B) quotient C) addend D) product

Answer: A

465) Use the facts below.

$$2 \cdot 3 = 6 \qquad 4 + 17 = 21 \qquad 20 - 9 = 11 \qquad \begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 5 above is called the _____.

- A) factor B) divisor C) quotient D) dividend

Answer: B

466) Use the facts below.

$$2 \cdot 3 = 6 \qquad 4 + 17 = 21 \qquad 20 - 9 = 11 \qquad \begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 35 above is called the _____.

- A) divisor B) dividend C) quotient D) minuend

Answer: B

467) Use the facts below.

$2 \cdot 3 = 6$

$4 + 17 = 21$

$20 - 9 = 11$

$$\begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 7 above is called the _____.

A) dividend

B) divisor

C) quotient

D) subtrahend

Answer: C

468) Use the facts below.

$2 \cdot 3 = 6$

$4 + 17 = 21$

$20 - 9 = 11$

$$\begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 3 above is called a(n) _____.

A) addend

B) dividend

C) factor

D) divisor

Answer: C

469) Use the facts below.

$2 \cdot 3 = 6$

$4 + 17 = 21$

$20 - 9 = 11$

$$\begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 6 above is called the _____.

A) dividend

B) factor

C) product

D) sum

Answer: C

470) Use the facts below.

$2 \cdot 3 = 6$

$4 + 17 = 21$

$20 - 9 = 11$

$$\begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 20 above is called the _____.

A) minuend

B) difference

C) dividend

D) subtrahend

Answer: A

471) Use the facts below.

$2 \cdot 3 = 6$

$4 + 17 = 21$

$20 - 9 = 11$

$$\begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 9 above is called the _____.

A) subtrahend

B) difference

C) addend

D) minuend

Answer: A

472) Use the facts below.

$2 \cdot 3 = 6$

$4 + 17 = 21$

$20 - 9 = 11$

$$\begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 11 above is called the _____.

A) minuend

B) difference

C) subtrahend

D) quotient

Answer: B

473) Use the facts below.

$2 \cdot 3 = 6$

$4 + 17 = 21$

$20 - 9 = 11$

$$\begin{array}{r} 7 \\ 5 \overline{)35} \end{array}$$

The 4 above is called a(n) _____.

A) addend

B) subtrahend

C) factor

D) sum

Answer: A

Provide an appropriate response.

474) Write 63,496 in words.

A) sixty- three thousand, four hundred ninety- six

B) six thousand, four hundred ninety- six

C) sixty thousand, four hundred ninety- six

D) sixty- three thousand, forty- nine hundred, six

Answer: A

475) Write "three hundred seven thousand, five hundred ninety- four" in standard form.

A) 370,594

B) 3,007,594

C) 37,594

D) 307,594

Answer: D

Simplify.

476) $85 + 27$

A) 113

B) 102

C) 111

D) 112

Answer: D

477) $501 - 277$

A) 225

B) 224

C) 334

D) 234

Answer: B

478)

$$\begin{array}{r} 185 \\ \times 50 \\ \hline \end{array}$$

A) 9,250

B) 10,250

C) 19,250

D) 8,250

Answer: A

479) $16,329 \div 43$

A) 379 R 29

B) 379

C) 379 R 32

D) 32

Answer: C

480) $2^3 \cdot 5^2$

A) 384

B) 200

C) 128

D) 256

Answer: B

481) $23 \div 1$

A) 23

B) 0

C) 1

D) undefined

Answer: A

482) $0 \div 39$

A) 0

B) 39

C) undefined

D) 1

Answer: A

483) $29 \div 0$

A) undefined

B) 29

C) 1

D) 0

Answer: A

484) $(9^2 - 4) \cdot 2$

A) 50

B) 90

C) 73

D) 154

Answer: D

485) $9 + 9 \div 3 \cdot 5 - 2$

A) 28

B) 73

C) 26

D) 22

Answer: D

486) $8^1 \cdot 4^3$

A) 512

B) 96

C) 72

D) 32,768

Answer: A

487) $4[(8 - 5)^2 + (19 - 17)^2] + 15$

A) 37

B) 112

C) 4

D) 67

Answer: D

488) $3,221 \cdot 10$

A) 322,100

B) 322,110

C) 32,210

D) 32,211

Answer: C

Provide an appropriate response.

489) Find the average of 65, 59, 51, 55, and 65.

A) 65

B) 51

C) 58

D) 59

Answer: D

490) Round 19,791 to the nearest thousand.

A) 20,000

B) 19,800

C) 19,000

D) 19,700

Answer: A

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

491) $5,458 + 7,709 + 3,679$

A) 18,000

B) 16,800

C) 16,000

D) 16,900

Answer: D

492) $8,264 - 3,143$

A) 5,000

B) 5,200

C) 5,121

D) 5,100

Answer: B

Solve.

493) Subtract 86 from 515.

A) 601

B) 329

C) 419

D) 429

Answer: D

494) Find the sum of 40 and 205.

A) 8,200

B) 165

C) 490

D) 245

Answer: D

495) Find the product of 16 and 508.

A) 8,136

B) 928

C) 8,128

D) 8,120

Answer: C

496) Find the quotient of 141 and 19.

A) 7 R 9

B) 8 R 8

C) 6 R 6

D) 7 R 8

Answer: D

497) Amy teaches Chinese lessons for \$75 per student for a 6- week session. From one group of students, she collects \$3,150. How many students are in the group?

A) 46 students

B) 32 students

C) 42 students

D) 44 students

Answer: C

498) Last year, Lu Yi's tax refund was \$574. This year it was \$736. How much more was this year's refund than last year's refund?

A) \$62

B) \$1,310

C) \$162

D) \$154

Answer: C

499) The seats in a lecture hall are arranged in 12 rows with 7 seats in each row. How many seats are in this lecture hall?

A) 91 seats

B) 94 seats

C) 84 seats

D) 77 seats

Answer: C

500) In preparation for his new job, David bought two suits at \$184 a piece, six shirts at \$27 a piece, two pairs of shoes at \$68 a piece, and four ties at \$28 a piece. What was the total cost of these items?

A) \$834

B) \$778

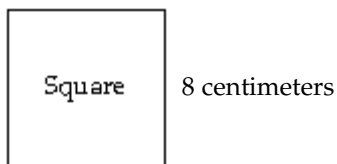
C) \$314

D) \$813

Answer: B

Find the perimeter and the area of the figure.

501)



A) perimeter: 64 cm; area: 32 sq cm

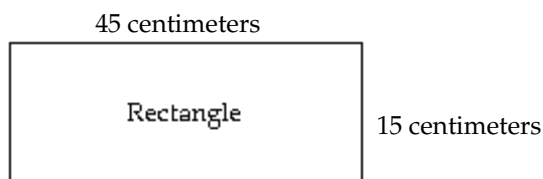
B) perimeter: 32 cm; area: 64 sq cm

C) perimeter: 16 cm; area: 64 sq cm

D) perimeter: 32 cm; area: 256 sq cm

Answer: B

502)



- A) perimeter: 60 cm; area: 675 sq cm
C) perimeter: 675 cm; area: 120 sq cm

- B) perimeter: 120 cm; area: 675 sq cm
D) perimeter: 120 cm; area: 1,350 sq cm

Answer: B

Provide an appropriate response.

503) Evaluate $4 + (x^3 - 2)$ for $x = 5$.

- A) 27 B) 119 C) 123 D) 127

Answer: D

504) Evaluate $\frac{15x + 10y}{3}$ for $x = 9$ and $y = 3$.

- A) - 35 B) 55 C) 165 D) 45

Answer: B

Translate the phrase into a mathematical expression. Use x to represent "a number".

505) The quotient of a number and 7

- A) $\frac{x}{7}$ B) $x - 7$ C) $\frac{7}{x}$ D) $7x$

Answer: A

506) 4 times a number, decreased by 3

- A) $4 - 3x$ B) $3x - 4$ C) $3 - 4x$ D) $4x - 3$

Answer: D

Provide an appropriate response.

507) Is 10 a solution of the equation $8x - 6 = 74$?

- A) yes B) no

Answer: A

508) Determine which number in the set is a solution to the given equation.

$$2x - 5 = 75 - 8x; \{0, 8, 10\}$$

- A) none of them B) 0 C) 8 D) 10

Answer: C

Answer Key

Testname: UNTITLED11

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

Answer Key

Testname: UNTITLED11

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

Answer Key

Testname: UNTITLED11

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

Answer Key

Testname: UNTITLED11

151) C

152) B

153) C

154) A

155) A

156) A

157) A

158) D

159) A

160) A

161) D

162) A

163) B

164) B

165)

$\begin{array}{r} 24,8\bar{2}1 \\ - 6090 \\ \hline 18,7\bar{3}1 \end{array}$

166) A

167) B

168) D

169) C

170) D

171) B

172) B

173) A

174) B

175) B

176) B

177) C

178) B

179) A

180) A

181) C

182) B

183) B

184) B

185) C

186) B

187) D

188) C

189) C

190) D

191) C

192) B

193) B

194) C

195) A

196) D

197) D

Answer Key

Testname: UNTITLED11

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

Answer Key

Testname: UNTITLED11

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

Answer Key

Testname: UNTITLED11

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

Answer Key

Testname: UNTITLED11

- 348) C
- 349) C
- 350) B
- 351) B
- 352) C
- 353) A
- 354) B
- 355) D
- 356) C
- 357) A
- 358) B
- 359) C
- 360) D
- 361) A
- 362) A
- 363) A
- 364) A
- 365) D
- 366) B
- 367) B
- 368) C
- 369) D
- 370) C
- 371) A
- 372) D
- 373) C
- 374) C
- 375) A
- 376) D
- 377) C
- 378) C
- 379) A
- 380) C
- 381) B
- 382) C
- 383) C
- 384) D
- 385) D
- 386) A
- 387) B
- 388) A
- 389) D
- 390) A
- 391) A
- 392) D
- 393) C
- 394) D
- 395) D
- 396) B
- 397) D

Answer Key

Testname: UNTITLED11

- 398) B
- 399) D
- 400) D
- 401) D
- 402) A
- 403) A
- 404) A
- 405) D
- 406) C
- 407) B
- 408) A
- 409) B
- 410) A
- 411) D
- 412) C
- 413) A
- 414) B
- 415) D
- 416) D
- 417) D
- 418) B
- 419) B
- 420) C
- 421) C
- 422) B
- 423) D
- 424) D
- 425) A
- 426) A
- 427) B
- 428) B
- 429) A
- 430) A
- 431) B
- 432) C
- 433) B
- 434) C
- 435) B
- 436) A
- 437) B
- 438) B
- 439) D
- 440) C
- 441) D
- 442) C
- 443) D
- 444) B
- 445) D
- 446) B
- 447) C

Answer Key

Testname: UNTITLED11

- 448) B
- 449) D
- 450) B
- 451) A
- 452) C
- 453) C
- 454) B
- 455) B
- 456) D
- 457) A
- 458) D
- 459) D
- 460) C
- 461) D
- 462) B
- 463) B
- 464) A
- 465) B
- 466) B
- 467) C
- 468) C
- 469) C
- 470) A
- 471) A
- 472) B
- 473) A
- 474) A
- 475) D
- 476) D
- 477) B
- 478) A
- 479) C
- 480) B
- 481) A
- 482) A
- 483) A
- 484) D
- 485) D
- 486) A
- 487) D
- 488) C
- 489) D
- 490) A
- 491) D
- 492) B
- 493) D
- 494) D
- 495) C
- 496) D
- 497) C

Answer Key

Testname: UNTITLED11

498) C

499) C

500) B

501) B

502) B

503) D

504) B

505) A

506) D

507) A

508) C