

***Algebra Foundations 2nd edition Martin Gay Test
Bank***

SKU: 9780135239247-TEST-BANK

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) Don't be afraid to ask questions |
| C) Organize your class materials | D) Do your homework |

Answer: C

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

Answer: D

- 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 Tests | D) Chapter Highlights |

Answer: B

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

Answer: A

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

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

Answer: C

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

Answer: B

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

Answer: D

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

Answer: D

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

Answer: B

10) 403,681,295

- A) hundred-millions
- C) thousands

- B) hundred-thousands
- D) millions

Answer: D

11) 463,981

- A) hundred-thousands
- C) thousands

- B) ten-thousands
- D) hundreds

Answer: C

12) 45,271,903

- A) tens

- B) hundreds

- C) ten-millions

- D) ones

Answer: D

Write the whole number in words.

13) 483

- A) four hundred thirty-eight
- C) four hundred eighty-three

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

Answer: C

14) 3072

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

- B) thirty thousand, seventy-two
- D) three thousand, seventy-two

Answer: D

15) 5870

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

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

Answer: B

16) 135,060

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

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

Answer: B

17) 9,300,695

- A) nine million, thirty thousand, six hundred ninety-five
- B) ninety-three thousand, six hundred ninety-five
- C) nine million, three hundred thousand, six hundred ninety-five
- D) nine million, three thousand, six hundred ninety-five

Answer: C

18) 22,000,674

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

Answer: A

19) 64,568,009

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

Answer: A

20) 235,060

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

Answer: A

21) 4,200,091

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

Answer: D

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

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

Answer: B

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

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

Answer: A

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

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

Answer: B

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

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

Answer: C

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

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

Answer: A

- 30) The population of Annie's hometown is approximately 1,650,000.
- A) sixteen million, five hundred thousand
 - B) one million, six hundred fifty thousand
 - C) one hundred sixty-five thousand
 - D) one million, sixty-five thousand

Answer: B

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

Answer: C

Write the whole number in standard form.

- 32) Eight thousand, one hundred sixty-seven
- A) 8167
 - B) 810,067
 - C) 81,067
 - D) 800,167

Answer: A

- 33) Thirty-two thousand, nine hundred five
- A) 32,950
 - B) 3295
 - C) 32,905
 - D) 320,905

Answer: C

- 34) Seven thousand, six
- A) 7060
 - B) 76,000
 - C) 7600
 - D) 7006

Answer: D

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

Answer: C

- 36) Two hundred six thousand, one hundred seven
- A) 206,107
 - B) 2617
 - C) 207,106
 - D) 260,170

Answer: A

- 37) One hundred million, six thousand
A) 1,600,000 B) 1006 C) 100,006,000 D) 106,000,000

Answer: C

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

Answer: D

- 39) Seven million, nine thousand, five hundred forty-one
A) 7,090,541 B) 709,541 C) 790,541 D) 7,009,541

Answer: D

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) 2180 B) 2018 C) 21,008 D) 2108

Answer: D

- 41) Jamie drove five hundred twenty-seven miles to visit his parents.
A) 5027 B) 527 C) 572 D) 5270

Answer: B

- 42) Andy collected eighty-two thousand dollars for his campaign.
A) 802,000 B) 80,002 C) 82,000 D) 8200

Answer: C

- 43) The Johnsons have driven their car forty-five thousand, eight hundred two miles in the last few years.
A) 450,802 B) 4582 C) 45,802 D) 45,820

Answer: C

- 44) A certain exotic sports car costs three hundred twelve thousand, one hundred ninety-two dollars.
A) 31,212 B) 312,192 C) 3,201,920 D) 312,192,000

Answer: B

- 45) The population of BigTown is one million, three hundred thirty-five thousand, five hundred six.
A) 13,035,560 B) 1,335,506 C) 133,506 D) 1,035,506

Answer: B

- 46) Don figured out that he had lived five hundred eighty-two million, sixteen thousand seconds.
A) 58,216,000 B) 582,016,000 C) 582,000,016,000 D) 582,160,000

Answer: B

- 47) The volume of water in the lake is eight hundred twenty-one million, ninety-four thousand, six hundred thirteen gallons.
A) 821,000,094,613 B) 821,094,613 C) 821,940,613 D) 82,194,613

Answer: B

- 48) Last year a town consumed ninety-seven million, six thousand twenty-two gallons of water.
A) 97,060,022 B) 976,022 C) 97,006,220 D) 97,006,022

Answer: D

Write the whole number in expanded form.

49) 685

A) $68,500$

B) $600 + 80 + 5$

C) $500 + 80 + 6$

D) $6000 + 800 + 50$

Answer: B

50) 1867

A) $100 + 60 + 8$

B) $1,867,000$

C) $1000 + 800 + 60 + 7$

D) $7000 + 600 + 80 + 1$

Answer: C

51) 87,516

A) $87,516$

B) $80,000 + 7000 + 500 + 10 + 6$

C) $8000 + 700 + 50 + 16$

D) $60,000 + 1000 + 500 + 70 + 8$

Answer: B

52) 20,500

A) $20,000 + 500$

B) $2000 + 500$

C) $2,500,000$

D) $20,000 + 5000$

Answer: A

53) 8090

A) $80,000 + 9000$

B) $809,000$

C) $800 + 9$

D) $8000 + 90$

Answer: D

54) 30,520

A) $3000 + 500 + 2$

B) $30,000 + 5000 + 20$

C) $30,000 + 500 + 20$

D) $3000 + 50 + 2$

Answer: C

55) 2,080,210

A) $2,000,000 + 8000 + 200 + 1$

B) $2,000,000 + 80,000 + 200 + 10$

C) $2,000,000 + 80,000 + 2000 + 10$

D) $200,000 + 80,000 + 200 + 10$

Answer: B

56) 58,208,004

A) $50,000,000 + 8,000,000 + 200,000 + 8000 + 4$

B) $50,000,000 + 8,000,000 + 200,000 + 800 + 4$

C) $50,000,000 + 800,000 + 20,000 + 8000 + 4$

D) $58,000,000 + 208,000 + 4$

Answer: A

Write the whole number in the sentence in expanded form.

57) A local radio antenna is 1461 feet tall.

A) $1000 + 400 + 60 + 1$

B) $10,000 + 4000 + 600 + 1$

C) $1000 + 400 + 61$

D) $10,000 + 400 + 60 + 1$

Answer: A

58) Ron and Sally climbed a mountain having an elevation of 4936 ft.

A) $40,000 + 900 + 30 + 6$

B) $4000 + 900 + 30 + 6$

C) $40,000 + 9000 + 30 + 6$

D) $400 + 30 + 9$

Answer: B

Solve.

59) Write the largest four-digit number that can be made from the digits 7, 6, 9, and 2 if each digit must be used once.

A) 9762

B) 7962

C) 9726

D) 2679

Answer: A

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) twenty thousand, seventy-eight

C) two thousand, seven hundred eight

B) two thousand, seven hundred eighty

D) two thousand, seventy-eight

Answer: D

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

A) thirty-seven thousand, sixty

C) three thousand, seven hundred sixty

B) three hundred seventy-six

D) three thousand, seventy-six

Answer: C

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

A) $2000 + 700 + 80$

B) $2000 + 700 + 8$

C) $2700 + 80$

D) $2000 + 70 + 8$

Answer: A

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

A) $3000 + 70 + 6$

B) $300 + 70 + 6$

C) $3000 + 700 + 6$

D) $3700 + 6$

Answer: C

64) Who won the election?

A) Ms. Vaporis

B) Mr. Barone

C) Mr. Olsen

D) Ms. Li

Answer: D

65) Which candidate received the fewest votes?

A) Mr. Olsen

B) Ms. Vaporis

C) Mr. Barone

D) Ms. Li

Answer: A

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

A) Ms. Li

B) Mr. Barone

C) Mr. Olsen

D) Ms. Vaporis

Answer: D

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) Angela Wong

B) Sandra Ouye

C) Jose Gonzales

D) Sue Miller

Answer: A

68) Which candidate received the fewest votes?

A) Tyler Johnson

B) Sue Miller

C) Jose Gonzales

D) Sandra Ouye

Answer: D

69) Which candidate spent the least on advertising?

A) Tyler Johnson

B) Angela Wong

C) Jose Gonzales

D) Sandra Ouye

Answer: B

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

A) \$66,154

B) \$41,036

C) \$72,607

D) \$66,514

Answer: D

71) How many votes were received by Sue Miller?

A) 67,108

B) 67,901

C) 67,091

D) 102,376

Answer: C

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

A) five thousand, seven hundred twenty-nine

B) fifty-seven thousand, twenty-nine

C) fifty-seven thousand, two hundred ninety

D) fifty-seven thousand, two hundred nine

Answer: D

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

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

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

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

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

Answer: C

Add.

74) $26 + 31$

A) 75

B) 57

C) 39

D) 84

Answer: B

75) $57 + 25$

A) 72

B) 81

C) 83

D) 82

Answer: D

76)

$$\begin{array}{r} 15 \\ + 23 \\ \hline \end{array}$$

A) 47

B) 83

C) 38

D) 65

Answer: C

77)

$$\begin{array}{r} 21 \\ 23 \\ + 23 \\ \hline \end{array}$$

A) 76

B) 85

C) 67

D) 58

Answer: C

78) $14 + 11 + 21$

A) 46

B) 37

C) 64

D) 73

Answer: A

79)

$$\begin{array}{r} 8 \\ 5 \\ 2 \\ 4 \\ + 9 \\ \hline \end{array}$$

A) 26

B) 31

C) 28

D) 29

Answer: C

80)

$$\begin{array}{r} 40 \\ 14 \\ 6 \\ 34 \\ + 58 \\ \hline \end{array}$$

A) 175

B) 206

C) 152

D) 162

Answer: C

81)

$$\begin{array}{r} 9797 \\ + 2175 \\ \hline \end{array}$$

A) 1528

B) 1629

C) 1662

D) 11,972

Answer: D

82)

$$\begin{array}{r} 6598 \\ 88 \\ 89 \\ + 4332 \\ \hline \end{array}$$

A) 10,007

B) 10,097

C) 10,997

D) 11,107

Answer: D

83) $60 + 500 + 70$

A) 63

B) 630

C) 530

D) 126

Answer: B

84) $1388 + 3329$

A) 1128

B) 4717

C) 1107

D) 1027

Answer: B

85) $21,223 + 13,213$

A) 34,436

B) 52,436

C) 34,344

D) 34,346

Answer: A

86) $783 + 6395$

A) 7188

B) 7178

C) 7078

D) 6178

Answer: B

87) $901 + 30,465$

A) 39,475

B) 32,796

C) 31,366

D) 30,366

Answer: C

88)

$$\begin{array}{r} 369 \\ + 946 \\ \hline \end{array}$$

A) 825

B) 1315

C) 926

D) 905

Answer: B

89)

$$\begin{array}{r} 356 \\ + 67 \\ \hline \end{array}$$

A) 413

B) 1026

C) 424

D) 423

Answer: D

90)

$$\begin{array}{r} 6406 \\ + 555 \\ \hline \end{array}$$

A) 6961

B) 5961

C) 6861

D) 6971

Answer: A

91)

$$\begin{array}{r} 59,744 \\ + 171 \\ \hline \end{array}$$

A) 59,925

B) 59,815

C) 59,915

D) 61,454

Answer: C

92)

$$\begin{array}{r} 86,427 \\ + 45,846 \\ \hline \end{array}$$

A) 131,273

B) 142,273

C) 132,273

D) 131,173

Answer: C

93) $363 + 873$

A) 820

B) 936

C) 920

D) 1236

Answer: D

94) $3427 + 683 + 19 + 7576$

A) 11,595

B) 10,695

C) 11,705

D) 10,605

Answer: C

95)

$$\begin{array}{r} 5730 \\ 346 \\ 51 \\ + 5791 \\ \hline \end{array}$$

A) 11,808

B) 11,918

C) 10,908

D) 10,818

Answer: B

96)

$$\begin{array}{r} 79 \\ 725 \\ 4693 \\ + 16,123 \\ \hline \end{array}$$

A) 21,600

B) 21,520

C) 20,620

D) 21,620

Answer: D

97)

$$\begin{array}{r} 7473 \\ 684 \\ 19 \\ 3888 \\ + 5259 \\ \hline \end{array}$$

A) 16,223

B) 17,323

C) 16,313

D) 17,213

Answer: B

98)

$$\begin{array}{r} 41,171 \\ 1222 \\ + 35,297 \\ \hline \end{array}$$

A) 78,790

B) 77,790

C) 77,690

D) 76,690

Answer: C

99)

$$\begin{array}{r} 78,508,649 \\ 6,218,583 \\ 372,372 \\ + 8,434,016 \\ \hline \end{array}$$

A) 93,663,620

B) 93,521,490

C) 96,884,968

D) 93,533,620

Answer: D

100)

$$\begin{array}{r} 598,489 \\ 44,089 \\ + 6,443,907 \\ \hline \end{array}$$

A) 7,087,485

B) 6,086,485

C) 7,086,485

D) 7,076,485

Answer: C

101)

$$\begin{array}{r} 4,130,531 \\ 3,723,894 \\ + 4,252,232 \\ \hline \end{array}$$

A) 12,106,757

B) 12,107,657

C) 12,006,657

D) 12,106,657

Answer: D

Solve.

102) Find the sum of 853 and 4871.

A) 5824

B) 5725

C) 5714

D) 5724

Answer: D

103) Find the total of 83, 38, 7, 14, and 148.

A) 142

B) 283

C) 207

D) 290

Answer: D

104) What is 479 increased by 91?

A) 569

B) 580

C) 560

D) 570

Answer: D

105) What is 3219 plus 549 plus 30?

A) 3798

B) 3771

C) 3698

D) 3808

Answer: A

Subtract.

106)

$$\begin{array}{r} 57 \\ - 15 \\ \hline \end{array}$$

A) 42

B) 72

C) 32

D) 82

Answer: A

107)

$$\begin{array}{r} 999 \\ - 324 \\ \hline \end{array}$$

A) 575

B) 667

C) 675

D) 1323

Answer: C

108)

$$\begin{array}{r} 995 \\ - 23 \\ \hline \end{array}$$

A) 1018

B) 972

C) 872

D) 966

Answer: B

109)

$$\begin{array}{r} 51 \\ - 47 \\ \hline \end{array}$$

A) 4

B) 2

C) 98

D) 14

Answer: A

110)

$$\begin{array}{r} 736 \\ - 183 \\ \hline \end{array}$$

A) 919

B) 453

C) 547

D) 553

Answer: D

111)

$$\begin{array}{r} 955 \\ - 87 \\ \hline \end{array}$$

A) 768

B) 868

C) 858

D) 1042

Answer: B

112)

$$\begin{array}{r} 1817 \\ - 789 \\ \hline \end{array}$$

A) 1028

B) 1014

C) 28

D) 994

Answer: A

113)

$$\begin{array}{r} 5747 \\ - 3385 \\ \hline \end{array}$$

- A) 2272 B) 2362 C) 2352 D) 5362
Answer: B

114)

$$\begin{array}{r} 5589 \\ - 2854 \\ \hline \end{array}$$

- A) 2627 B) 2735 C) 2727 D) 4735
Answer: B

115) 63,446 - 55,665

- A) 7781 B) 12,781 C) 7691 D) 7771
Answer: A

116) 9010 - 1478

- A) 8642 B) 7532 C) 8468 D) 9442
Answer: B

117)

$$\begin{array}{r} 51,245 \\ - 5855 \\ \hline \end{array}$$

- A) 45,390 B) 45,300 C) 45,380 D) 50,390
Answer: A

118)

$$\begin{array}{r} 7030 \\ - 4363 \\ \hline \end{array}$$

- A) 3333 B) 4377 C) 2667 D) 3777
Answer: C

119)

$$\begin{array}{r} 51,445 \\ - 17,551 \\ \hline \end{array}$$

- A) 33,812 B) 33,894 C) 40,894 D) 33,892
Answer: B

120)

$$\begin{array}{r} 70,000 \\ - 38,164 \\ \hline \end{array}$$

- A) 98,164 B) 95,166 C) 31,836 D) 48,164
Answer: C

121) $70,000 - 11,642$

A) 58,358

B) 71,642

C) 79,468

D) 61,642

Answer: A

122) $83,693 - 7986$

A) 75,707

B) 83,527

C) 75,407

D) 79,707

Answer: A

Solve.

123) Find 4 subtracted from 92.

A) 87

B) 88

C) 89

D) 98

Answer: B

124) Find the difference of 37 and 9

A) 27

B) 29

C) 38

D) 28

Answer: D

125) Subtract 7 from 35.

A) 27

B) 38

C) 29

D) 28

Answer: D

126) Find the difference of 73 and 8.

A) 65

B) 66

C) 75

D) 64

Answer: A

127) Find 59 subtracted from 85.

A) 106

B) 26

C) 144

D) 16

Answer: B

128) Find 714 less 95.

A) 519

B) 809

C) 611

D) 619

Answer: D

129) Find 38 subtracted from 55.

A) 7

B) 17

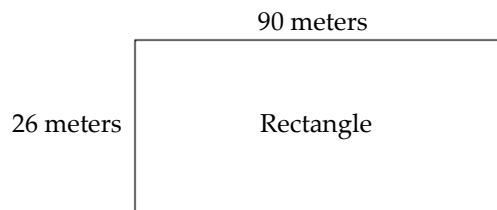
C) 27

D) 93

Answer: B

Find the perimeter.

130)



A) 116 m

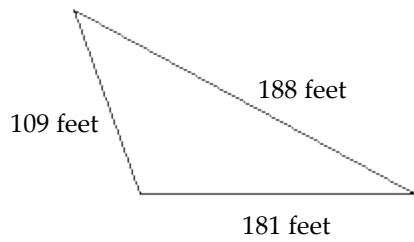
B) 2340 m

C) 206 m

D) 232 m

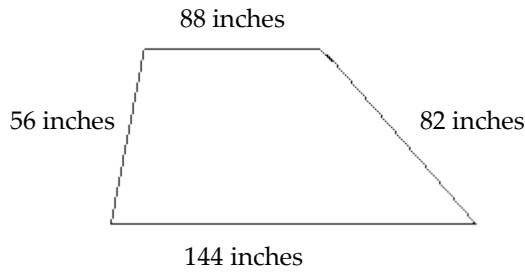
Answer: D

131)



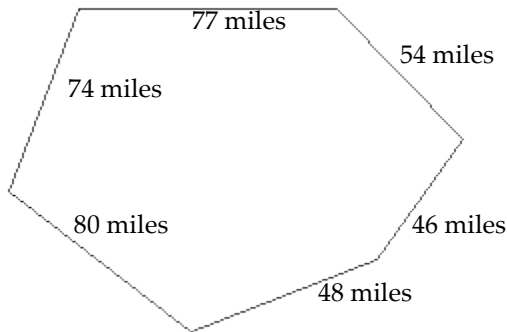
- A) 468 ft B) 297 ft C) 34,325 ft D) 478 ft
- Answer: D

132)



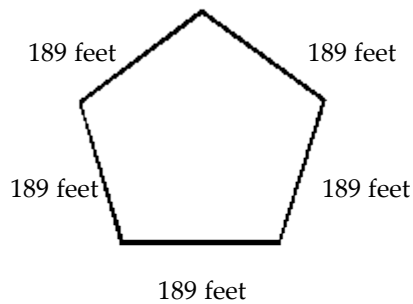
- A) 282 in. B) 340 in. C) 276 in. D) 370 in.
- Answer: D

133)



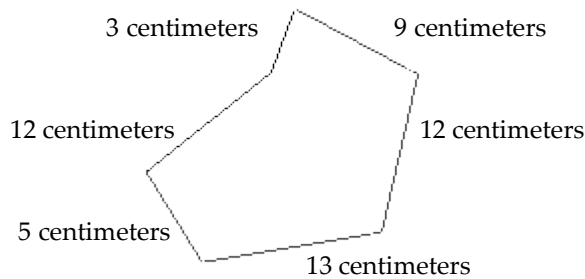
- A) 399 mi B) 456 mi C) 379 mi D) 305 mi
- Answer: C

134)



- A) 35,721 ft B) 1134 ft C) 960 ft D) 945 ft
- Answer: D

135)



A) 48 cm

B) 59 cm

C) 42 cm

D) 54 cm

Answer: D

Solve.

- 136) Lew is installing an invisible fence in his back yard which measures 98 feet by 65 feet by 85 feet by 97 feet. How many feet of wiring is needed to enclose his yard?

A) 355 ft

B) 365 ft

C) 345 ft

D) 335 ft

Answer: C

- 137) A store sold 32 lamps on Monday, 16 lamps on Tuesday, and 26 lamps on Wednesday. How many lamps did the store sell in all?

A) 73 lamps

B) 84 lamps

C) 75 lamps

D) 74 lamps

Answer: D

- 138) Last year a company had 5899 employees. This year the number of employees increased by 1389. How many employees does the company have now?

A) 7298 employees

B) 7388 employees

C) 7188 employees

D) 7288 employees

Answer: D

- 139) A town's population in 1976 was 152,650. By the year 2000 it had increased by 27,659. How many people lived there in 2000?

A) 179,309 people

B) 180,409 people

C) 180,309 people

D) 181,309 people

Answer: C

- 140) A store sold 32 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) 76 CD players

B) 75 CD players

C) 77 CD players

D) 86 CD players

Answer: A

- 141) Monica went shopping for holiday presents for her family. She spent \$303 on Monday, \$294 on Tuesday, and \$262 on Wednesday. What is the total amount of money that she spent on gifts?

A) \$859

B) \$759

C) \$949

D) \$849

Answer: A

- 142) A programmer picks up a rental car that has an odometer reading of 11,841 miles on it. When she returns it, the odometer reads 12,657 miles. How many miles did she drive the rental car?

A) 916 mi

B) 816 mi

C) 4698 mi

D) 616 mi

Answer: B

- 143) The Bislington City school system has 3403 high school students, 3312 middle school students, and 4739 elementary school students. How many students are in the Bislington City school system in total?
 A) 11,414 students B) 11,362 students C) 11,509 students D) 11,454 students
 Answer: D
- 144) An election for student body president was held over 3 days. On the first day Carlos received 158 votes and Tina received 142 votes. On the second day Carlos received 124 votes and Tina received 255 votes. On the third day Carlos received 357 votes and Tina received 187 votes. How many votes did Tina receive?
 A) 639 votes B) 584 votes C) 566 votes D) 736 votes
 Answer: B
- 145) It is 77 miles from Waterton to Hartford. It is 94 miles from Hartford to Cayfield. Driving directly, it is 134 miles directly from Waterton to Cayfield. It is 43 miles from Cayfield to Morland. If Martin drives from Waterton to Hartford, then from Hartford to Cayfield, and finally home to Waterton, how many miles does he drive?
 A) 254 mi B) 305 mi C) 315 mi D) 348 mi
 Answer: B
- 146) A stock worth \$184 per share on July 12 dropped to \$97 per share on July 31 of the same year. Find how much it lost in value from July 12th to the 31st.
 A) \$93 B) \$87 C) \$97 D) \$88
 Answer: B
- 147) Claire is reading a 401–page book. If she has just finished reading page 189, how many more pages must she read to finish the book?
 A) 222 pages B) 322 pages C) 212 pages D) 213 pages
 Answer: C
- 148) A camera that sells regularly for \$530 is discounted by \$79 in a sale. What is the sale price?
 A) \$79 B) \$451 C) \$609 D) \$461
 Answer: B
- 149) Janet has a total of \$2404 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) \$1176 C) \$1177 D) \$1167
 Answer: C
- 150) Pat is trading her car in for a new car. The new car costs \$30,025. Her car is worth \$9998. How much more money does she need to buy the new car?
 A) \$20,027 B) \$19,927 C) \$20,017 D) \$20,028
 Answer: A
- 151) The population of Graham County is 677,668. The population of Marshall County is 126,885. The population of Irving County is 152,226. How much greater is the population of Graham County than Irving County?
 A) 560,783 B) 525,442 C) 525,432 D) 550,783
 Answer: B

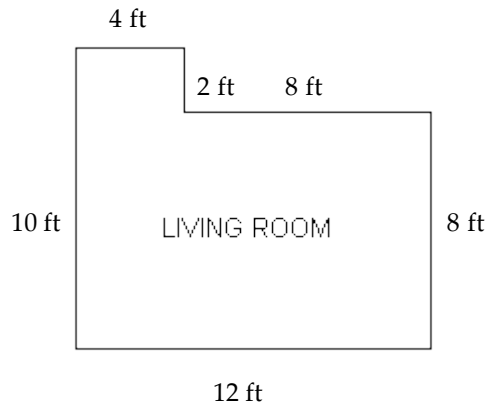
152) As part of homecoming festivities the student organizations are selling donuts. The fraternities have sold 521,119 donuts; the sororities have sold 219,734 donuts; the band members have sold 347,916 donuts; and the athletes have sold 118,921 donuts. Have they reached their goal of 2 million donuts sold? If not, how many more donuts need to be sold?

A) yes

B) no; 792,310

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) 40 ft

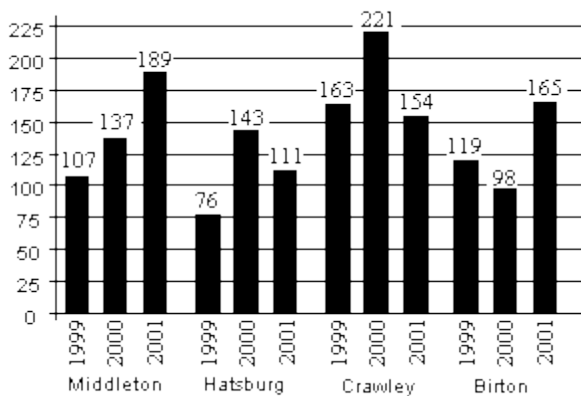
B) 44 ft

C) 42 ft

D) 36 ft

Answer: B

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 Hatsburg from 1999 to 2000?

A) 67

B) 52

C) 42

D) 77

Answer: A

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

A) 321

B) 417

C) 433

D) 330

Answer: D

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

A) 417

B) 330

C) 382

D) 282

Answer: C

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

Answer: C

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

Answer: D

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

Answer: B

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

Answer: A

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

Answer: C

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 Indiana increase from 1990 to 2000?
 A) 555,209 B) 501,462 C) 555,309 D) 501,362

Answer: D

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

City	Number of Restaurants
Carlsbad	500
Potters Vale	321
Little Heath	265
Edgbaston	264
Barrow	310

- How many more restaurants are there in Carlsbad than in Barrow?
 A) 500 B) 810 C) 190 D) 236

Answer: C

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

City	Number of Restaurants
Carlsbad	421
Potters Vale	265
Little Heath	202
Edgbaston	224
Barrow	279

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

- A) 878 B) 988 C) 1391 D) 888

Answer: D

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.

$$\begin{array}{r} 2_7_1 \\ - 519_ \\ \hline 19,5_1 \end{array}$$

Answer:

$$\begin{array}{r} 24,721 \\ - 5190 \\ \hline 19,531 \end{array}$$

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

Round the whole number to the given place.

166) 915 to the nearest ten

- A) 930 B) 1020 C) 910 D) 920

Answer: D

167) 797 to the nearest ten

- A) 800 B) 790 C) 810 D) 780

Answer: A

168) 3238 to the nearest hundred

- A) 3300 B) 3200 C) 3210 D) 3100

Answer: B

169) 2856 to the nearest hundred

- A) 2900 B) 2890 C) 3000 D) 2800

Answer: A

170) 29,343 to the nearest hundred

- A) 29,200 B) 29,400 C) 29,300 D) 29,310

Answer: C

171) 4498 to the nearest thousand

A) 4000

B) 3900

C) 5000

D) 4100

Answer: A

172) 71,065 to the nearest thousand

A) 81,000

B) 71,000

C) 71,100

D) 72,000

Answer: B

173) 68,680 to the nearest thousand

A) 69,000

B) 68,000

C) 70,000

D) 68,700

Answer: A

174) 347,263 to the nearest ten thousand

A) 347,000

B) 400,000

C) 350,000

D) 340,000

Answer: C

175) 46,890 to the nearest ten thousand

A) 46,900

B) 50,000

C) 46,000

D) 47,000

Answer: B

176) 19,597,220 to the nearest million

A) 19,600,000

B) 19,000,000

C) 19,597,000

D) 20,000,000

Answer: D

177) 3999 to the nearest ten

A) 3,900

B) 4,000

C) 3,990

D) 3,000

Answer: B

178) 967,495 to the nearest hundred

A) 968,000

B) 967,400

C) 967,500

D) 967,000

Answer: C

179) 957,499 to the nearest thousand

A) 958,000

B) 957,500

C) 957,000

D) 957,400

Answer: C

180) 9,999,997 to the nearest ten

A) 100,000,000

B) 10,000,000

C) 10,000,090

D) 9,999,990

Answer: B

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

181) 4205

A) Ten 4200

B) Ten 4210

C) Ten 4200

D) Ten 4210

Hundred 4200

Hundred 4300

Hundred 4300

Hundred 4200

Thousand 4000

Thousand 4000

Thousand 5000

Thousand 4000

Answer: D

182) 8563

- | | | | | | | | |
|----------|------|----------|------|----------|------|----------|------|
| A) Ten | 8560 | B) Ten | 8570 | C) Ten | 8570 | D) Ten | 8560 |
| Hundred | 8600 | Hundred | 8600 | Hundred | 8500 | Hundred | 8500 |
| Thousand | 9000 | Thousand | 9000 | Thousand | 8000 | Thousand | 9000 |

Answer: A

183) 5392

- | | | | | | | | |
|----------|------|----------|------|----------|------|----------|------|
| A) Ten | 5390 | B) Ten | 5400 | C) Ten | 5400 | D) Ten | 5390 |
| Hundred | 5300 | Hundred | 5300 | Hundred | 5400 | Hundred | 5400 |
| Thousand | 5000 | Thousand | 6000 | Thousand | 5000 | Thousand | 5000 |

Answer: D

184) 6386

- | | | | | | | | |
|----------|------|----------|------|----------|------|----------|------|
| A) Ten | 6390 | B) Ten | 6380 | C) Ten | 6390 | D) Ten | 6380 |
| Hundred | 6300 | Hundred | 6300 | Hundred | 6400 | Hundred | 6400 |
| Thousand | 6000 | Thousand | 7000 | Thousand | 6000 | Thousand | 6000 |

Answer: C

185) 46,860

- | | | | | | | | |
|----------|--------|----------|--------|----------|--------|----------|--------|
| A) Ten | 46,860 | B) Ten | 46,860 | C) Ten | 46,870 | D) Ten | 46,870 |
| Hundred | 46,900 | Hundred | 46,870 | Hundred | 46,900 | Hundred | 46,800 |
| Thousand | 47,000 | Thousand | 46,000 | Thousand | 50,000 | Thousand | 46,000 |

Answer: A

186) 94,165

- | | | | | | | | |
|----------|--------|----------|--------|----------|--------|----------|--------|
| A) Ten | 94,160 | B) Ten | 94,160 | C) Ten | 94,170 | D) Ten | 94,170 |
| Hundred | 94,200 | Hundred | 94,100 | Hundred | 94,160 | Hundred | 94,200 |
| Thousand | 94,180 | Thousand | 95,000 | Thousand | 95,000 | Thousand | 94,000 |

Answer: D

Round the whole number to the given place.

187) In 2006, the number of students enrolled at a certain university was 65,673 . Round this number to the nearest thousand.

- | | | | |
|-----------|-----------|-----------|-----------|
| A) 65,700 | B) 65,000 | C) 70,000 | D) 66,000 |
|-----------|-----------|-----------|-----------|

Answer: D

188) In 2005, a company spent \$793,749,510 on advertising. Round the advertising figure to the nearest hundred-thousand.

- | | | | |
|----------------|----------------|----------------|----------------|
| A) 800,000,000 | B) 793,800,000 | C) 700,000,000 | D) 793,700,000 |
|----------------|----------------|----------------|----------------|

Answer: D

189) A publishing company sold 27,267,591 books in 2000. Round the number of books sold to the nearest ten-million.

- | | | | |
|---------------|---------------|---------------|---------------|
| A) 27,000,000 | B) 20,000,000 | C) 27,270,000 | D) 30,000,000 |
|---------------|---------------|---------------|---------------|

Answer: D

190) In 2005, the sales of a certain multinational corporation were \$68,581,000,000. Round this amount to the nearest billion.

- | | | | |
|---------------------|---------------------|---------------------|---------------------|
| A) \$69,000,000,000 | B) \$68,600,000,000 | C) \$70,000,000,000 | D) \$68,000,000,000 |
|---------------------|---------------------|---------------------|---------------------|

Answer: A

- 191) In 2005, the population of a certain city was 58,650,560. Round this number to the nearest million.
A) 60,000,000 B) 58,000,000 C) 58,700,000 D) 59,000,000

Answer: D

- 192) In 2005, a company spent \$793,749,655 on television advertising. Round this amount to the nearest hundred-million.
A) \$700,000,000 B) \$793,800,000 C) \$800,000,000 D) \$793,700,000

Answer: C

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

193)

$$\begin{array}{r} 72 \\ 58 \\ 17 \\ 66 \\ + 69 \\ \hline \end{array}$$

- A) 290 B) 300 C) 280 D) 282
Answer: A

194)

$$\begin{array}{r} 93 \\ - 75 \\ \hline \end{array}$$

- A) 170 B) 10 C) 18 D) 20
Answer: B

195)

$$\begin{array}{r} 74 \\ + 93 \\ \hline \end{array}$$

- A) 160 B) 170 C) 200 D) 167
Answer: A

196)

$$\begin{array}{r} 8566 \\ - 1233 \\ \hline \end{array}$$

- A) 7333 B) 7330 C) 7340 D) 7300
Answer: C

197)

$$\begin{array}{r} 703 \\ - 58 \\ \hline \end{array}$$

- A) 640 B) 600 C) 650 D) 645
Answer: A

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

198)

$$\begin{array}{r} 866 \\ 469 \\ 356 \\ 691 \\ + 279 \\ \hline \end{array}$$

A) 2700

B) 2661

C) 2800

D) 2660

Answer: C

199)

$$\begin{array}{r} 863 \\ - 127 \\ \hline \end{array}$$

A) 800

B) 700

C) 1000

D) 736

Answer: A

200)

$$\begin{array}{r} 8062 \\ + 5266 \\ \hline \end{array}$$

A) 13,000

B) 13,400

C) 13,300

D) 13,328

Answer: B

201)

$$\begin{array}{r} 642 \\ 448 \\ 428 \\ 627 \\ + 397 \\ \hline \end{array}$$

A) 2400

B) 2542

C) 2500

D) 2540

Answer: A

202)

$$\begin{array}{r} 5622 \\ 7521 \\ + 3328 \\ \hline \end{array}$$

A) 16,400

B) 16,000

C) 18,000

D) 16,500

Answer: A

203)

$$\begin{array}{r} 873 \\ - 524 \\ \hline \end{array}$$

A) 349

B) 1400

C) 300

D) 400

Answer: D

204)

$$\begin{array}{r} 9963 \\ - 1532 \\ \hline \end{array}$$

A) 8400

B) 8000

C) 8431

D) 8500

Answer: D

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

205) $918 + 789 + 518 + 585 = 2810$

A) Incorrect. Estimate: 2900

B) Incorrect. Estimate: 3000

C) Incorrect. Estimate: 2700

D) Correct. Estimate: 2800

Answer: D

206) $782 + 738 + 226 + 784 = 2730$

A) Incorrect. Estimate: 2700

B) Incorrect. Estimate: 2500

C) Incorrect. Estimate: 2300

D) Incorrect. Estimate: 2600

Answer: B

Solve the problem by estimating.

207) Andy wants to buy a refrigerator for \$899, a stove for \$859, and a dishwasher for \$249. Round each cost to the nearest hundred to estimate the total cost.

A) \$2000

B) \$2100

C) \$1900

D) \$1800

Answer: A

208) The Pan family took a trip and traveled 64, 265, 649, 539, 598, and 460 miles on 6 consecutive days. Round each distance to the nearest hundred to estimate the distance they traveled.

A) 2500 miles

B) 2700 miles

C) 2800 miles

D) 2600 miles

Answer: D

209) Linda scored 72, 65, 60, 78, 64, and 100 on her calculus tests. Round each score to the nearest ten to estimate her total score.

A) 450

B) 420

C) 440

D) 430

Answer: C

210) Toni's car has 87,321 miles on the odometer, while Bill's car has 21,650 miles on the odometer. Round each mileage to the nearest thousand to estimate the differences in the mileages of the two cars.

A) 65,000 mi

B) 65,700 mi

C) 66,000 mi

D) 65,800 mi

Answer: A

211) Enrollment figures at a community college showed an increase from 43,542 credit hours in 2005 to 71,301 credit hours in 2006. Round each number to the nearest thousand to estimate the increase.

A) 27,800 credit hours

B) 27,000 credit hours

C) 27,900 credit hours

D) 28,000 credit hours

Answer: B

212) Nicole can buy a motorbike for \$2747 or a car for \$6072. Round each price to the nearest hundred to estimate the difference in the prices of the two vehicles.

A) \$3400

B) \$3000

C) \$3300

D) \$3325

Answer: A

213) In 1999, the population of Capital City was 7,685,831 and the population of Spring City was 2,522,652.. Round each population to the nearest hundred-thousand to estimate the difference in the populations of the two cities.

A) 5,300,000

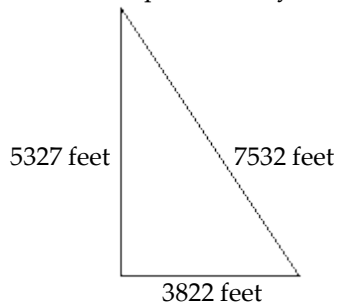
B) 5,163,000

C) 5,200,000

D) 5,100,000

Answer: C

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



A) 16,700 ft

B) 16,600 ft

C) 8300 ft

D) 10,179,900 ft

Answer: B

215) A number rounded to the nearest hundred is 9600. Determine the smallest possible number.

A) 9550

B) 9551

C) 9650

D) 9549

Answer: A

Multiply.

216) $36 \cdot 1$

A) 0

B) 361

C) 36

D) 1

Answer: C

217) $1 \cdot 48$

A) 48

B) 148

C) 0

D) 1

Answer: A

218) $95 \cdot 0$

A) 950

B) 0

C) 95

D) 1

Answer: B

219) $0 \cdot 44$

A) 44

B) $\frac{1}{44}$

C) 0

D) 1

Answer: C

220) $7 \cdot 7 \cdot 0$

A) 49

B) 14

C) 0

D) 770

Answer: C

221) $94 \cdot 0 \cdot 5$

A) 470

B) 0

C) 450

D) 570

Answer: B

Use the distributive property to rewrite the expression.

222) $9(9 + 4)$

A) $9 \cdot 9 \cdot 4$

B) $9 + 9 + 4$

C) $9 \cdot 9 + 4$

D) $9 \cdot 9 + 9 \cdot 4$

Answer: D

223) $2(1 + 11)$

A) $2 + 1 + 11$

B) $2 \cdot 1 + 11$

C) $2 \cdot 1 \cdot 11$

D) $2 \cdot 1 + 2 \cdot 11$

Answer: D

224) $47(48 + 42)$

A) $47 + 48 + 42$

B) $47 \cdot 90$

C) $47 \cdot 48 + 42$

D) $47 \cdot 48 + 47 \cdot 42$

Answer: D

Multiply.

225)

$$\begin{array}{r} 27 \\ \times 3 \\ \hline \end{array}$$

A) 81

B) 181

C) 70

D) 61

Answer: A

226)

$$\begin{array}{r} 493 \\ \times 8 \\ \hline \end{array}$$

A) 3944

B) 4044

C) 3844

D) 3954

Answer: A

227) 598×6

A) 3598

B) 3588

C) 3488

D) 3688

Answer: B

228) 6493×4

A) 25,972

B) 26,072

C) 25,982

D) 25,872

Answer: A

229)

$$\begin{array}{r} 9153 \\ \times 3 \\ \hline \end{array}$$

A) 27,359

B) 27,469

C) 27,559

D) 27,459

Answer: D

230)

$$\begin{array}{r} 96,458 \\ \times 4 \\ \hline \end{array}$$

A) 385,822

B) 385,832

C) 385,932

D) 385,802

Answer: B

231)

$$\begin{array}{r} 34 \\ \times 22 \\ \hline \end{array}$$

- A) 758 B) 848 C) 748 D) 738
Answer: C

232)

$$\begin{array}{r} 477 \\ \times 48 \\ \hline \end{array}$$

- A) 22,996 B) 22,906 C) 22,886 D) 22,896
Answer: D

233)

$$\begin{array}{r} 109 \\ \times 16 \\ \hline \end{array}$$

- A) 1753 B) 1735 C) 304 D) 1744
Answer: D

234)

$$\begin{array}{r} 832 \\ \times 948 \\ \hline \end{array}$$

- A) 788,736 B) 788,726 C) 788,746 D) 788,836
Answer: A

235)

$$\begin{array}{r} 773 \\ \times 110 \\ \hline \end{array}$$

- A) 8503 B) 77,300 C) 850,300 D) 85,030
Answer: D

236)

$$\begin{array}{r} 8548 \\ \times 273 \\ \hline \end{array}$$

- A) 2,333,704 B) 2,343,604 C) 2,333,604 D) 2,332,604
Answer: C

237) (51)(801)(0)

- A) 0 B) 40,841 C) 40,851 D) 40,951
Answer: A

238) (190)(60)

- A) 11,396 B) 11,400 C) 11,390 D) 11,410
Answer: B

239) $(930)(1)(50)$
 A) 46,500 B) 46,510 C) 46,490 D) 46,496
 Answer: A

240) 1466×98
 A) 24,922 B) 143,668 C) 131,948 D) 12,194
 Answer: B

241) 395×390
 A) 154,060 B) 154,040 C) 154,050 D) 154,150
 Answer: C

242)

$$\begin{array}{r} 1107 \\ \times 504 \\ \hline \end{array}$$

 A) 556,821 B) 9963 C) 557,928 D) 59,778
 Answer: C

243)

$$\begin{array}{r} 1812 \\ \times 2409 \\ \hline \end{array}$$

 A) 3,640,308 B) 4,511,880 C) 3,712,788 D) 4,365,108
 Answer: D

Estimate the answer by rounding as indicated.

244) Estimate the product by rounding each factor to the nearest ten.
 98×53
 A) 4500 B) 5000 C) 9000 D) 6000
 Answer: B

245) Estimate the product by rounding each factor to the nearest hundred.
 919×824
 A) 1700 B) 757,300 C) 757,256 D) 720,000
 Answer: D

246) Estimate the product by rounding each factor to the nearest hundred.
 509×306
 A) 1500 B) 15,000,000 C) 15,000 D) 150,000
 Answer: D

247) Estimate the product by rounding each factor to the nearest hundred.
 103×299
 A) 20,000 B) 30,000 C) 200,000 D) 300,000
 Answer: B

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

$$751 \times 15$$

A) 770

B) 11,270

C) 11,265

D) 15,000

Answer: D

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

$$837 \times 99$$

A) 90,000

B) 72,000

C) 81,000

D) 80,000

Answer: D

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

$$9237 \times 2660$$

A) 24,570,400

B) 27,000,000

C) 24,570,000

D) 24,840,000

Answer: B

Solve.

251) Find the product of 6 and 200.

A) 120

B) 1200

C) 12,000

D) 800

Answer: B

252) Multiply 40 by 23.

A) 820

B) 92

C) 82

D) 920

Answer: D

253) Find 3 times 3247.

A) 9751

B) 9641

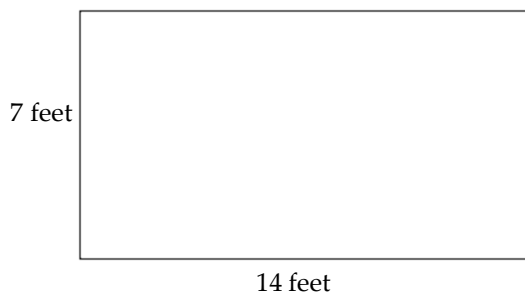
C) 9741

D) 9841

Answer: C

Find the area of the rectangle.

254)



A) 49 sq ft

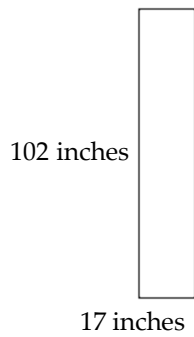
B) 196 sq ft

C) 98 sq ft

D) 147 sq ft

Answer: C

255)



A) 119 sq in.

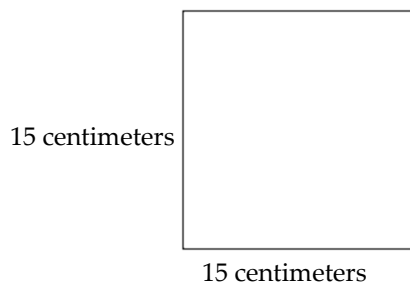
B) 1445 sq in.

C) 1734 sq in.

D) 1724 sq in.

Answer: C

256)



A) 60 sq cm

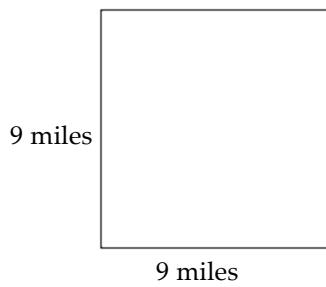
B) 225 sq cm

C) 220 sq cm

D) 450 sq cm

Answer: B

257)



A) 84 sq mi

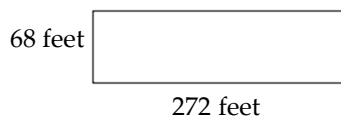
B) 81 sq mi

C) 77 sq mi

D) 36 sq mi

Answer: B

258)



A) 18,486 sq ft

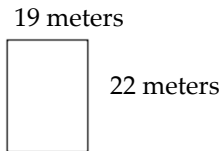
B) 680 sq ft

C) 18,496 sq ft

D) 18,506 sq ft

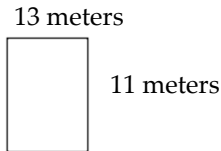
Answer: C

259)



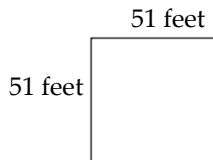
- A) 41 sq m B) 418 sq m C) 836 sq m D) 82 sq m
- Answer: B

260)



- A) 48 sq m B) 286 sq m C) 143 sq m D) 24 sq m
- Answer: C

261)



- A) 204 sq ft B) 2601 sq ft C) 102 sq ft D) 5202 sq ft
- Answer: B

Solve.

262) The textbook for a history class costs \$39. There are 26 students in the class. Find the total cost of the history books for the class.

- A) \$1014 B) \$65 C) \$975 D) \$988
- Answer: A

263) The seats in the lecture hall are arranged in 17 rows with 7 seats in each row. Find how many seats are in this room.

- A) 129 seats B) 119 seats C) 112 seats D) 126 seats
- Answer: B

264) A case of candy bars has 2 layers of candy bars. In each layer are 5 rows with 16 candy bars in each row. Find how many candy bars are in a case.

- A) 159 candy bars B) 170 candy bars C) 150 candy bars D) 160 candy bars
- Answer: D

265) An apartment complex has 5 apartment buildings. Each building has 6 floors with 9 apartments per floor. Find how many apartments are in this complex.

- A) 260 apartments B) 280 apartments C) 270 apartments D) 20 apartments
- Answer: C

- 266) A rectangular plot of land measure 70 feet by 180 feet. Find its area.
 A) 250 sq ft B) 1260 sq ft C) 12,600 sq ft D) 500 sq ft
 Answer: C
- 267) The floor plan of a building is a rectangle which measures 280 meters by 70 meters. Find the floor area of the building.
 A) 19,610 sq m B) 19,590 sq m C) 700 sq m D) 19,600 sq m
 Answer: D
- 268) A mural on the wall of a building is a rectangle which measures 658 in. by 110 in. Find the area of the mural.
 A) 723,800 sq in. B) 65,800 sq in. C) 7238 sq in. D) 72,380 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 847 miles. Find the diameter of planet A.
 A) 7613 mi B) 7614 mi C) 7523 mi D) 7623 mi
 Answer: D
- 270) A company rents a mid-size car at \$323 per month for six months. What is the cost for the car rental during this time?
 A) \$1887 B) \$1938 C) \$329 D) \$1970
 Answer: B
- 271) There are 93 guinea pigs in a room, with an assortment of black and white ears and paws. 19 have totally black ears and 2 white paws, 25 guinea pigs have 1 black ear and 3 white paws, and 49 have no black ears and 1 white paw. How many black paws are in the room?
 A) 210 B) 209 C) 162 D) 165
 Answer: A
- 272) During the recent Homecoming football game, State U. scored the following: 6 six-point touchdowns, 6 extra points, 3 three-point field goals, and 1 two-point safety. What was State U.'s final score?
 A) 26 points B) 53 points C) 25 points D) 17 points
 Answer: B
- 273) A spreadsheet is a rectangular array containing 35 rows and 17 entries in each row. How many entries does the spreadsheet contain?
 A) 560 entries B) 5950 entries C) 20,825 entries D) 595 entries
 Answer: D
- 274) Mark's typing speed is 71 words per minute. How many words can he type in 26 minutes?
 A) 1846 words B) 1746 words C) 97 words D) 1856 words
 Answer: A
- 275) One packet of peanuts has 16 grams of fat. How many grams of fat are in 7 packets of peanuts?
 A) 122 g B) 105 g C) 119 g D) 112 g
 Answer: D
- 276) One bag of Alice's favorite cookies contains 436 calories. How many calories are in 8 bags of cookies?
 A) 3488 cal B) 3200 cal C) 2124 cal D) 3520 cal
 Answer: A

- 277) Tickets for a bluegrass music festival cost \$30 for an adult, \$16 for seniors, \$10 for students, and \$9 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	14	\$30	\$420
Senior	8	\$16	
Student	17	\$10	
Child under 12	5	\$9	

- A) \$763 B) \$738 C) \$774 D) \$65

Answer: A

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

$$\begin{array}{r} 4__ \\ \times __5 \\ \hline 220 \\ \underline{1320} \\ 1540 \end{array}$$

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

Answer: B

Find the quotient.

279) $\frac{36}{4}$

- A) 8 R 4 B) 9 C) 10 D) 8 R 3

Answer: B

280) $\frac{14}{7}$

- A) 1 R 6 B) 2 C) 3 D) 1 R 7

Answer: B

281) $35 \div 5$

- A) 8 B) 6 R 5 C) 7 D) 6 R 4

Answer: C

282) $28 \div 7$

- A) 3 R 6 B) 5 C) 3 R 7 D) 4

Answer: D

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

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

Answer: D

284) $\frac{0}{3}$

A) 3

B) 0

C) 1

D) undefined

Answer: B

285) $5 \div 1$

A) 0

B) 5

C) 1

D) undefined

Answer: B

286) $38 \div 1$

A) 1

B) 38

C) $\frac{1}{38}$

D) undefined

Answer: B

287) $24 \div 0$

A) 0

B) 24

C) $\frac{1}{24}$

D) undefined

Answer: D

288) $42 \div 42$

A) 0

B) 1

C) 42

D) undefined

Answer: B

289) $0 \div 71$

A) 0

B) 71

C) 1

D) undefined

Answer: A

Divide.

290) $5 \overline{)10}$

A) 2

B) 1 R 4

C) 3

D) 1 R 5

Answer: A

291) $6 \overline{)36}$

A) 5 R 5

B) 7

C) 6

D) 5 R 6

Answer: C

292) $8 \overline{)400}$

A) 50

B) 48

C) 52

D) 53

Answer: A

293) $3 \overline{)393}$

A) 131

B) 129

C) 133

D) 134

Answer: A

294) $3 \overline{)4491}$

A) 1495

B) 1497 R 2

C) 1495 R 1

D) 1497

Answer: D

- 295) $23 \overline{)230}$
 A) 10
 Answer: A
- B) 11 R 5
 C) 10 R 15
 D) 11 R 13
- 296) $6848 \div 32$
 A) 214 R 23
 Answer: D
- B) 215
 C) 215 R 22
 D) 214
- 297) $51 \overline{)80,478}$
 A) 1578
 Answer: A
- B) 1588 R 22
 C) 1583 R 14
 D) 1568
- 298) $\frac{62,944}{56}$
 A) 1129 R 39
 Answer: C
- B) 1114
 C) 1124
 D) 1134 R 47
- 299) $313 \div 9$
 A) 34
 Answer: C
- B) 41
 C) 34 R 7
 D) 34 R 8
- 300) $7310 \div 6$
 A) 1218 R 2
 Answer: A
- B) 1220
 C) 1218 R 5
 D) 1218
- 301) $5 \overline{)2272}$
 A) 454
 Answer: B
- B) 454 R 2
 C) 454 R 1
 D) 453 R 7
- 302) $4605 \div 6$
 A) 766 R 9
 Answer: C
- B) 767
 C) 767 R 3
 D) 767 R 2
- 303) $115 \div 18$
 A) 6 R 7
 Answer: A
- B) 7 R 7
 C) 6 R 8
 D) 5 R 5
- 304) $495 \div 48$
 A) 10
 Answer: D
- B) 8 R 7
 C) 9 R 39
 D) 10 R 15
- 305) $1608 \div 12$
 A) 135 R 2
 Answer: B
- B) 134
 C) 135
 D) 134 R 3
- 306) $57 \overline{)35,454}$
 A) 632 R 35
 Answer: D
- B) 627 R 27
 C) 612
 D) 622

$$307) \frac{41,704}{52}$$

A) 792

B) 812 R 46

C) 807 R 38

D) 802

Answer: D

$$308) 11,658 \div 17$$

A) 685 R 10

B) 685

C) 13

D) 685 R 13

Answer: D

$$309) \frac{5184}{144}$$

A) 36 R 5

B) 34

C) 34 R 27

D) 36

Answer: D

$$310) \frac{31,320}{216}$$

A) 155

B) 138

C) 1450

D) 145

Answer: D

$$311) 9775 \div 42$$

A) 232 R 31

B) 235 R 5

C) 232

D) 235 R 34

Answer: A

$$312) 61,191 \div 400$$

A) 152 R 301

B) 152

C) 152 R 391

D) 391

Answer: C

$$313) 364,681 \div 380$$

A) 959

B) 959 R 91

C) 959 R 261

D) 261

Answer: C

$$314) 346 \overline{)168,156}$$

A) 486

B) 4860

C) 485

D) 487

Answer: A

$$315) 97,813 \div 621$$

A) 157 R 316

B) 157 R 317

C) 157 R 216

D) 162 R 531

Answer: A

$$316) 981 \overline{)503,959}$$

A) 513 R 690

B) 513

C) 513 R 706

D) 706

Answer: C

Solve.

$$317) \text{ Find the quotient of 269 and 8.}$$

A) 38

B) 33

C) 33 R 5

D) 33 R 7

Answer: C

318) Find 139 divided by 3.

A) 46

B) 46 R 2

C) 47

D) 46 R 1

Answer: D

319) Find the quotient of 651 and 57.

A) 11

B) 9 R 7

C) 11 R 24

D) 10 R 48

Answer: C

320) Amy teaches Chinese lessons for \$65 per student for a 6-week session. From one group of students, she collects \$1820. Find how many students are in the group.

A) 30 students

B) 32 students

C) 18 students

D) 28 students

Answer: D

321) One ticket won a prize of \$7,824,000. The winning ticket was purchased by 24 people who had pooled their money. Find how many dollars each person receives if they each receive an equal share.

A) \$32,700

B) \$32,600

C) \$326,000

D) \$325,000

Answer: C

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 29,376 pounds on planet A, how much does it weigh on planet B?

A) 146 lb

B) 1360 lb

C) 129 lb

D) 136 lb

Answer: D

323) Ms. Losch has a piece of rope 227 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) 29 pieces of rope

B) 31 pieces of rope

C) 28 pieces of rope

D) 3 pieces of rope

Answer: C

324) A dairy produces 620,000 quarts of milk each day. There are 4 quarts in a gallon. How many gallons of milk are produced each day?

A) 2,480,000 gal

B) 1,550,000 gal

C) 155,000 gal

D) 15,500 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) 4 mi

C) 3 mi

D) 6 mi

Answer: C

326) There is a bridge over a certain highway every 7 miles. The first bridge is at the beginning of a 209-mile stretch of highway. Find how many bridges there are over 209 miles of the highway.

A) 25 bridges

B) 35 bridges

C) 29 bridges

D) 30 bridges

Answer: D

327) Charles wishes to pay off a car loan of \$4680 in 24 months. How large will his monthly payment be?

A) \$185

B) \$2340

C) \$195

D) \$190

Answer: C

328) 411 chocolates are to be packed into boxes each of which will contain 12 chocolates. How many boxes of chocolates will there be? How many chocolates will be left over?

A) 34 boxes; 3 chocolates left over

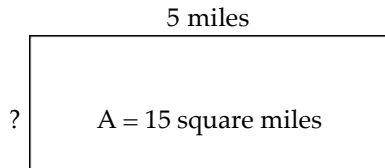
B) 33 boxes; 4 chocolates left over

C) 33 boxes; 3 chocolates left over

D) 34 boxes; no chocolates left over

Answer: A

329) If the area of a rectangle is 15 square miles and its length is 5 miles, what is its width?



A) $\frac{25}{3}$ mi

B) 75 mi

C) 5 mi

D) 3 mi

Answer: D

Find the average of the list of numbers.

330) 66, 52, 35, 30, 59, 34

A) 47

B) 52

C) 44

D) 46

Answer: D

331) 57, 61, 58, 62, 89, 56, 58

A) 63

B) 58

C) 73

D) 62

Answer: A

332) 436, 862, 827, 883

A) 802

B) 652

C) 752

D) 776

Answer: C

333) 154, 113, 135, 142, 151

A) 149

B) 138

C) 139

D) 142

Answer: C

334) 65, 59, 51, 55, 65

A) 58

B) 65

C) 59

D) 51

Answer: C

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.

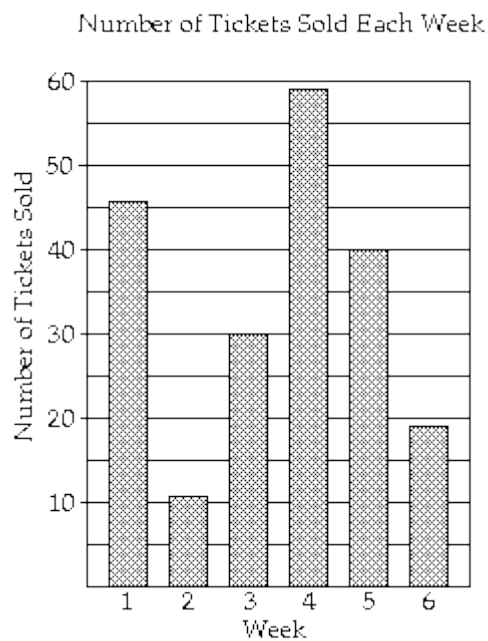
Bill	\$830
Jill	\$6500
Sue	\$2000
John	\$5575

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

- A) \$3726.25 B) \$4250 C) \$3202.50 D) \$8500

Answer: B

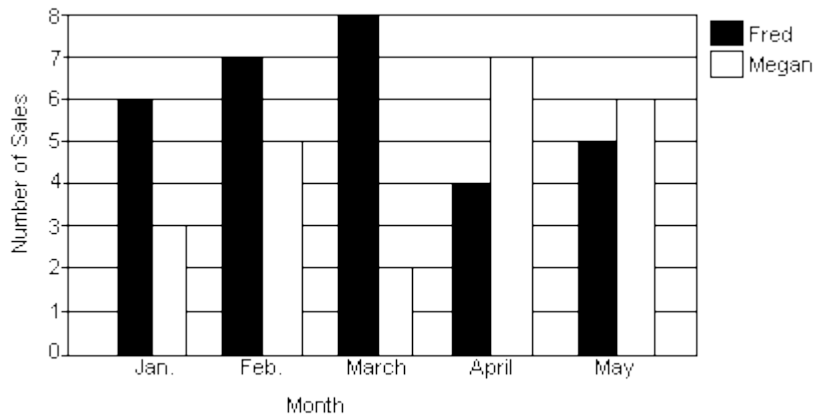
- 336) The bar graph shows the number of tickets sold each week by the garden club for their annual flower show. What was the average number of tickets sold during weeks 3, 4, and 5?



- A) 44 B) 129 C) 43 D) 42

Answer: C

- 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) 4 B) 5 C) 8 D) 6
 Answer: D

Write using exponential notation.

- 338) $5 \cdot 5$
 A) 5^2 B) $2 \cdot 5$ C) 5^3 D) 2^5
 Answer: A

- 339) $8 \cdot 8 \cdot 8$
 A) $3 \cdot 8$ B) 8^1 C) 3^8 D) 8^3
 Answer: D

- 340) $8 \cdot 8 \cdot 8 \cdot 8$
 A) 8^2 B) 4^8 C) 8^4 D) 32
 Answer: C

- 341) $9 \cdot 9 \cdot 9 \cdot 9 \cdot 9$
 A) $5 \cdot 9$ B) 9^0 C) 9^5 D) 5^9
 Answer: C

- 342) $15 \cdot 15 \cdot 15 \cdot 15$
 A) 4^{15} B) $4 \cdot 15$ C) 15^1 D) 15^4
 Answer: D

- 343) $14 \cdot 14 \cdot 14 \cdot 14 \cdot 14$
 A) $5 \cdot 14$ B) 14^5 C) 5^{14} D) $5 \cdot 5^{14}$
 Answer: B

- 344) $4 \cdot 4 \cdot 6 \cdot 6 \cdot 6 \cdot 6$
 A) $4^2 \cdot 6^4$ B) 24^6 C) $4 \cdot 6^6$ D) $2^4 \cdot 4^6$
 Answer: A

345) $7 \cdot 8 \cdot 8 \cdot 8 \cdot 8 \cdot 8$

A) 56^5

B) $1^7 \cdot 5^8$

C) $(7 \cdot 8)^5$

D) $7 \cdot 8^5$

Answer: D

346) $9 \cdot 9 \cdot 8 \cdot 8 \cdot 8 \cdot 8 \cdot 4$

A) $(9 \cdot 8 \cdot 4)^7$

B) $9 \cdot 8 \cdot 4^7$

C) $2^9 \cdot 4^8 \cdot 1^4$

D) $9^2 \cdot 8^4 \cdot 4$

Answer: D

347) $5 \cdot 5 \cdot 5 \cdot 9 \cdot 9 \cdot 9 \cdot 9 \cdot 9 \cdot 9 \cdot 2$

A) $5 \cdot 9 \cdot 2^{10}$

B) $5^3 \cdot 9^6 \cdot 2$

C) $(5 \cdot 9 \cdot 2)^{10}$

D) $3^5 \cdot 6^9 \cdot 1^2$

Answer: B

Evaluate.

348) 9^2

A) 512

B) 18

C) 81

D) 100

Answer: C

349) 10^2

A) 21

B) 101

C) 100

D) 20

Answer: C

350) 1^{12}

A) 112

B) 12

C) 1

D) undefined

Answer: C

351) 11^1

A) 111

B) 11

C) 1

D) undefined

Answer: B

352) 3^3

A) 10

B) 9

C) 28

D) 27

Answer: D

353) 9^3

A) 729

B) 27

C) 512

D) 19,683

Answer: A

354) 3^6

A) 729

B) 216

C) 2187

D) 18

Answer: A

355) 7^4

A) 16,384

B) 2401

C) 28

D) 343

Answer: B

356) 10^5
 A) 1,000,000 B) 9,765,625 C) 100,000 D) 50
 Answer: C

357) $7 \cdot 3^3$
 A) 9261 B) 34 C) 63 D) 189
 Answer: D

358) $4 \cdot 3^2$
 A) 24 B) 32 C) 36 D) 144
 Answer: C

Simplify.

359) $8 \cdot 7 - 5$
 A) 16 B) 51 C) 280 D) 61
 Answer: B

360) $30 + 2 \cdot 8$
 A) 300 B) 46 C) 14 D) 256
 Answer: B

361) $34 - 6 \cdot 2$
 A) 22 B) 136 C) 46 D) 56
 Answer: A

362) $240 \div 5 - 3$
 A) 120 B) 45 C) 238 D) 232
 Answer: B

363) $\frac{240}{8} - 4$
 A) 26 B) 228 C) 236 D) 60
 Answer: A

364) $12 \cdot 9 + 14 \cdot 10$
 A) 1220 B) 2760 C) 248 D) 1788
 Answer: C

365) $28 + 15 \cdot 10 - 19$
 A) 159 B) 34 C) 0 D) 411
 Answer: A

366) $12 + 9 \div 3 \cdot 5 - 6$
 A) 29 B) 84 C) 33 D) 21
 Answer: D

367) $0 \div 8 + 2 \cdot 3$
 A) 30 B) 6 C) 14 D) undefined
 Answer: B

- 368) $8^2 - 3 \cdot 5$
 A) 125 B) 49 C) 200 D) 305
 Answer: B
- 369) $48 \div 0 + 48$
 A) 48 B) 96 C) 1 D) undefined
 Answer: D
- 370) $4^2 \div 4 \times 7 + 7$
 A) 35 B) 0 C) 21 D) 196
 Answer: A
- 371) $(14 + 2) \cdot (11 - 6)$
 A) 30 B) 72 C) 24 D) 80
 Answer: D
- 372) $\frac{24 + 40 \div 2}{2^2}$
 A) 8 B) 29 C) 26 D) 11
 Answer: D
- 373) $(60 + 6^2) \div 3 \cdot 2^2$
 A) 63 B) 108 C) 8 D) 128
 Answer: D
- 374) $[129 - (14 - 6)] - 4^3$
 A) 185 B) 57 C) 109 D) 45
 Answer: B
- 375) $32 - (20 \div 4) + 3 \cdot 2^4$
 A) 75 B) 96 C) 480 D) 51
 Answer: A
- 376) $(5 + 2) \cdot 5 + [16 \div (4 \div 4)]$
 A) 31 B) 36 C) 16 D) 51
 Answer: D
- 377) $72 \div [2^2 + (37 - 6) - 3^3] + 7 \cdot 4$
 A) 100 B) 316 C) 37 D) 64
 Answer: C
- 378) $\frac{4^2 - 2^3 + 104}{32 \div 2 \cdot 4 \cdot 1 \div 4}$
 A) 28 B) 106 C) 7 D) 112
 Answer: C

379) $[33 - (4 + 6) \div 2] - [1 + 18 \div 3]$

A) 28

B) 18

C) 21

D) 16

Answer: C

380) $(6 + 3)[5 + (4 + 4)]$

A) 49

B) 378

C) 234

D) 117

Answer: D

381) $4 \cdot [7^2 + 3 \cdot (5 + 6)]$

A) 280

B) 2288

C) 61

D) 328

Answer: D

382) $5[3 + 3(4^2)]$

A) 5625

B) 735

C) 255

D) 1125

Answer: C

383) $\frac{13 + 7}{3^2 - 4}$

A) 4

B) 10

C) 2

D) 6

Answer: A

384) $\frac{24(6 - 3) - 12}{3^2 - 3}$

A) 20

B) 10

C) 13

D) 12

Answer: B

385) $23 - [6 + (10 - 3)] - (6 - 4)^3$

A) 18

B) 14

C) 32

D) 2

Answer: D

386) $5 \cdot (5 + 5)^2 - 4 \cdot (6 - 4)^2$

A) 884

B) 2436

C) 484

D) 1984

Answer: C

387) $340 - 2^3 \cdot 24 \div (4 \cdot 3 - 2 \cdot 2)$

A) 316

B) 660

C) 996

D) 320

Answer: A

388) $\{[57 - 2 \cdot 3] - [72 \div (1 + 2)]\} \cdot 5$

A) 125

B) 135

C) 165

D) 190

Answer: B

389) $3[(6 - 5)^2 + (20 - 17)^2] + 14$

A) 72

B) 44

C) 16

D) 3

Answer: B

390) $(66 - 15) \cdot [(80 + 10 \div 5) - (6 \cdot 6 - 3 \cdot 3)]$
 A) 2862 B) 2769

C) 2805 D) 2905

Answer: C

391) $2 \cdot \{(300 - 95 \div 5) - [3 \cdot 21 - (8 - 2 \cdot 3)]\}$
 A) -1060 B) 440

C) 2216 D) 390

Answer: B

Insert parentheses in order to make the statement true.

392) $2 \cdot 6 - 4 = 4$
 A) $2 \cdot (6 - 4) = 4$ B) $2 \cdot 6 (-4) = 4$

C) $(2 \cdot 6) - 4 = 4$ D) $(2)(6)(-4) = 4$

Answer: A

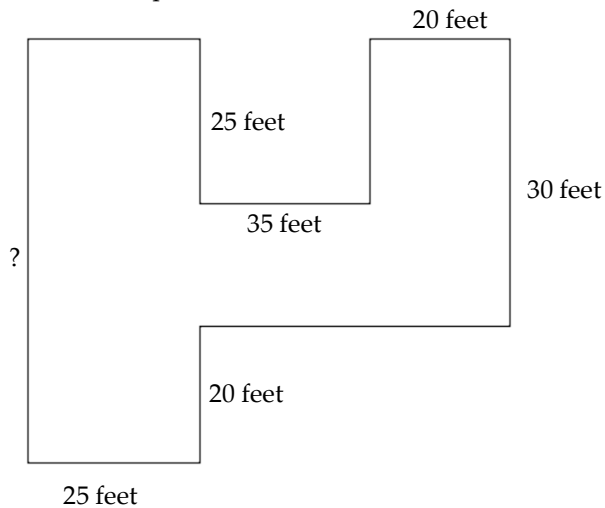
393) $4 + 2 \cdot 7 - 4 = 18$
 A) $4 + 2 \cdot (7 - 4) = 18$ B) $(4 + 2) \cdot (7 - 4) = 18$

C) $4 + (2 \cdot 7) - 4 = 18$ D) $(4 + 2) \cdot 7 - 4 = 18$

Answer: B

Solve.

- 394) Nine 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 nine pools to get a cost estimate. Find the total perimeter.



A) 315 ft B) 2790 ft

C) 1575 ft D) 310 ft

Answer: B

Find the area of the square.

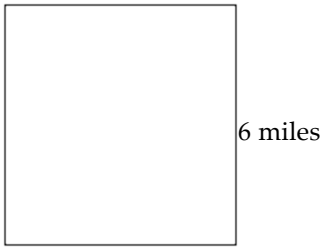
395) 13 centimeters

A) 164 sq cm B) 52 sq cm

C) 338 sq cm D) 169 sq cm

Answer: D

396)



A) 39 sq mi

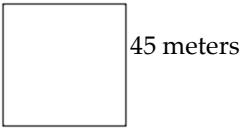
B) 36 sq mi

C) 32 sq mi

D) 24 sq mi

Answer: B

397)



A) 90 sq m

B) 180 sq m

C) 2025 sq m

D) 4050 sq m

Answer: C

Evaluate the expression for the given replacement values.

398) $x + y$ for $x = 15, y = 14$

A) 56

B) 92

C) 29

D) 65

Answer: C

399) $x \div y$ for $x = 250, y = 5$

A) 52

B) 53

C) 48

D) 50

Answer: D

400) $x \div y$ for $x = 504, y = 0$

A) 0

B) $\frac{1}{504}$

C) 504

D) undefined

Answer: D

401) $x \cdot y$ for $x = 4, y = 57$

A) 228

B) 211

C) 208

D) 328

Answer: A

402) $x - y + z$ for $x = 25, y = 7, z = 3$

A) 22

B) 35

C) 15

D) 21

Answer: D

403) $x - 3yz$ for $x = 79, y = 2, z = 5$

A) 365

B) 49

C) 69

D) 760

Answer: B

404) $x - (y + z)$ for $x = 20, y = 6, z = 2$

A) 17

B) 28

C) 12

D) 16

Answer: C

405) $18 - (y - z)$ for $y = 10, z = 1$

A) 10

B) 7

C) 29

D) 9

Answer: D

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

A) 30

B) 50

C) 20

D) 10

Answer: A

407) $5x + 4y$ for $x = 8$ and $y = 7$

A) 9

B) 44

C) 33

D) 68

Answer: D

408) $8x - 3y$ for $x = 7$ and $y = 5$

A) 71

B) 41

C) 51

D) 53

Answer: B

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

A) 20

B) 12

C) 68

D) 60

Answer: D

410) $6x^2 + 2x$ for $x = 4$

A) 88

B) 32

C) 56

D) 104

Answer: D

411) $\frac{6x}{y}$ for $x = 18, y = 3$

A) 36

B) 18

C) 90

D) 72

Answer: A

412) $\frac{x+y}{6}$ for $x = 30, y = 36$

A) 11

B) 66

C) 41

D) 36

Answer: A

413) $\frac{2x+4y}{2}$ for $x = 3, y = 4$

A) 11

B) 5

C) 22

D) 10

Answer: A

414) $\frac{5x}{7} + \frac{5y}{7}$ for $x = 35, y = 56$

A) 30

B) 33

C) 65

D) 305

Answer: C

415) $\frac{x}{9} + \frac{y}{9}$ for $x = 54, y = 27$

A) 81

B) 33

C) 9

D) 57

Answer: C

416) $(x + 3y)^2$ for $x = 2, y = 4$

A) 196

B) 25

C) 28

D) 14

Answer: A

417) $3x^2 + 8y$ for $x = 2, y = 9$

A) 108

B) 259

C) 84

D) 324

Answer: C

418) $3xy^2 - 7$ for $x = 4, y = 5$

A) 3593

B) 1193

C) 113

D) 293

Answer: D

419) $3y(4z - x)$ for $x = 7, y = 2, z = 6$

A) 102

B) 24

C) 51

D) 137

Answer: A

420) $\frac{8xy}{z}$ for $x = 6, y = 7, z = 2$

A) 336

B) 24

C) 334

D) 168

Answer: D

421) $\frac{12x - 15}{y}$ for $x = 7, y = 3$

A) 13

B) 79

C) 8

D) 23

Answer: D

422) $x^4 - (y - z)$ for $x = 3, y = 4, z = 3$

A) 74

B) 11

C) 5

D) 80

Answer: D

423) $(8x - yz)^3$ for $x = 2, y = 4, z = 3$

A) 46,656

B) 12

C) 324

D) 64

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 $C = 70$ to find the equivalent temperature in degrees Fahrenheit.

A) 158

B) 157

C) 172

D) 144

Answer: A

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

425) Is 6 a solution of $p + 12 = 18$?

A) yes

B) no

Answer: A

426) Is 15 a solution of $p - 13 = 2$?

A) yes

B) no

Answer: A

427) Is 8 a solution of $7m + 4 = 62$?

A) yes

B) no

Answer: B

428) Is 14 a solution of $6n = 78$?

A) yes

B) no

Answer: B

429) Is 3 a solution of $2x - 2 = 4$?

A) yes

B) no

Answer: A

430) Is 3 a solution of $2x - 2 = 16 - 4x$?

A) yes

B) no

Answer: A

431) Is 8 a solution of $10(r + 7) = 87$?

A) yes

B) no

Answer: B

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

432) $x + 3 = 8$; {4, 5, 6}

A) 4

B) 6

C) 5

D) none of them

Answer: C

433) $38 - n = 33$; {4, 5, 6}

A) 6

B) 4

C) 5

D) none of them

Answer: C

434) $4x = 24$; {6, 7, 96}

A) 6

B) 7

C) 96

D) none of them

Answer: A

435) $3 + (y + 2) = 14$; {9, 10, 11}

A) 9 and 11

B) 11

C) 9

D) 10

Answer: C

436) $10n + n = 99$; {9, 10, 1089}

A) 10

B) 9

C) 1089

D) 9 and 10

Answer: B

437) $6r + 10 = 46$; {2, 6, 30}

A) 30

B) 6

C) 2

D) none of them

Answer: B

438) $8n - 3 = 53$; {7, 9, 52}

A) 52

B) 9

C) 7

D) none of them

Answer: C

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

439) The total of 59 and a number

A) 59

B) $59 + x$

C) $59 - x$

D) $59x$

Answer: B

440) The sum of a number and 13

A) 13

B) $x - 13$

C) $13x$

D) $x + 13$

Answer: D

441) 2 times a number

A) $2x$

B) $2 + x$

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

D) $2 - x$

Answer: A

442) 106 less a number

A) $106 - x$

B) $\frac{106}{x}$

C) $x - 106$

D) $x + 106$

Answer: A

443) The product of 6 and a number

A) $\frac{6}{x}$

B) $6x$

C) $6 + x$

D) $6 - x$

Answer: B

444) 29 subtracted from a number

A) $x - 29$

B) 29

C) $29 - x$

D) $29x$

Answer: A

445) The difference of a number and 30

A) $x - 30$

B) 30

C) $30x$

D) $30 - x$

Answer: A

446) 45 decreased by a number

A) $45 - x$

B) $\frac{45}{x}$

C) $x - 45$

D) $45 + x$

Answer: A

447) A number divided by 69

A) $\frac{x}{69}$

B) $\frac{69}{x}$

C) $x - 69$

D) $69x$

Answer: A

448) The quotient of 36 and a number

A) $36 - x$

B) $x - 36$

C) $\frac{36}{x}$

D) $\frac{x}{36}$

Answer: C

449) 6 decreased by 8 times a number

A) $8x - 6$

B) $6 - 8x$

C) $6x - 8$

D) $8 - 6x$

Answer: B

450) 5 less than 9 times a number

A) $9 - 5x$

B) $9x - 5$

C) $5 - 9x$

D) $5x - 9$

Answer: B

451) 6 more than 8 times a number

A) $14x$

B) $8x + 6$

C) $6x + 8$

D) $8(6 + x)$

Answer: B

452) The quotient of a number and 8, decreased by 9

A) $\frac{x - 9}{8}$

B) $\frac{8}{x} - 9$

C) $\frac{8}{x - 9}$

D) $\frac{x}{8} - 9$

Answer: D

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

difference	factor	perimeter	dividend	minuend
place value	whole numbers	equation	divisor	variable
sum	set	addend	exponent	expression
solution	quotient	subtrahend	product	digits
				area

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

A) whole numbers

B) factor

C) place value

D) digits

Answer: A

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

A) area

B) perimeter

C) place value

D) product

Answer: B

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

A) factor

B) divisor

C) digits

D) place value

Answer: D

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

A) area

B) exponent

C) expression

D) equation

Answer: B

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) digits B) divisor C) dividend D) difference

Answer: A

459) A letter used to represent a number is called a(n) _____.
 A) addend B) solution C) variable D) place value

Answer: C

460) A(n) _____ can be written in the form "expression = expression."
 A) addend B) area C) equation D) exponent

Answer: C

461) A combination of operations on variables and numbers is called a(n) _____.
 A) addend B) expression C) exponent D) equation

Answer: B

462) A(n) _____ of an equation is a value of the variable that makes the equation a true statement.
 A) set B) expression C) sum D) solution

Answer: D

463) A collection of numbers (or objects) enclosed by braces is called a(n) _____.
 A) solution B) quotient C) subtrahend D) set

Answer: D

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) quotient B) addend C) product D) sum

Answer: D

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) dividend C) quotient D) divisor

Answer: D

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) dividend B) divisor C) minuend D) quotient

Answer: A

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) quotient

B) subtrahend

C) dividend

D) divisor

Answer: A

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) divisor

C) dividend

D) factor

Answer: D

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) factor

B) dividend

C) sum

D) product

Answer: D

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) subtrahend

C) difference

D) dividend

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) minuend

B) subtrahend

C) difference

D) addend

Answer: B

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) quotient

C) difference

D) subtrahend

Answer: C

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) sum

B) subtrahend

C) factor

D) addend

Answer: D

Provide an appropriate response.

474) Write 95,674 in words.

A) nine thousand, six hundred seventy-four

B) ninety-five thousand, sixty-seven hundred, four

C) ninety thousand, six hundred seventy-four

D) ninety-five thousand, six hundred seventy-four

Answer: D

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

A) 3,007,399

B) 37,399

C) 370,399

D) 307,399

Answer: D

Simplify.

476) $36 + 45$

A) 71

B) 81

C) 80

D) 82

Answer: B

477) $501 - 212$

A) 290

B) 399

C) 299

D) 289

Answer: D

478)

$$\begin{array}{r} 368 \\ \times 30 \\ \hline \end{array}$$

A) 21,040

B) 12,040

C) 11,040

D) 10,040

Answer: C

479) $22,878 \div 34$

A) 672 R 30

B) 672

C) 30

D) 672 R 21

Answer: A

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

A) 200

B) 384

C) 256

D) 128

Answer: A

481) $39 \div 1$

A) undefined

B) 39

C) 1

D) 0

Answer: B

482) $0 \div 35$

A) 0

B) 35

C) undefined

D) 1

Answer: A

483) $36 \div 0$
A) undefined B) 0 C) 1 D) 36
Answer: A

484) $(9^2 - 2) \cdot 2$
A) 158 B) 98 C) 77 D) 126
Answer: A

485) $8 + 16 \div 4 \cdot 3 - 9$
A) 9 B) 11 C) 39 D) 29
Answer: B

486) $3^1 \cdot 5^3$
A) 375 B) 128 C) 3375 D) 45
Answer: A

487) $4[(6 - 2)^2 + (20 - 19)^2] + 12$
A) 56 B) 4 C) 80 D) 116
Answer: C

488) $6072 \cdot 1000$
A) 6,072,100 B) 60,721,000 C) 6,072,000 D) 60,720,000
Answer: C

Provide an appropriate response.

489) Find the average of 40, 34, 26, 30, and 40.
A) 33 B) 26 C) 34 D) 40
Answer: C

490) Round 25,793 to the nearest thousand.
A) 25,700 B) 25,000 C) 25,800 D) 26,000
Answer: D

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

491) $5652 + 7752 + 3781$
A) 17,300 B) 16,000 C) 17,200 D) 18,000
Answer: A

492) $7776 - 1943$
A) 5800 B) 5833 C) 5900 D) 6000
Answer: C

Solve.

493) Subtract 97 from 913.
A) 816 B) 716 C) 810 D) 1010
Answer: A

494) Find the sum of 34 and 208.

A) 484

B) 242

C) 174

D) 7072

Answer: B

495) Find the product of 15 and 807.

A) 12,112

B) 1305

C) 12,105

D) 12,098

Answer: C

496) Find the quotient of 104 and 19.

A) 5 R 9

B) 5 R 10

C) 6 R 9

D) 4 R 4

Answer: A

497) Amy teaches Chinese lessons for \$95 per student for a 6-week session. From one group of students, she collects \$3420. How many students are in the group?

A) 26 students

B) 40 students

C) 38 students

D) 36 students

Answer: D

498) Last year, Lu Yi's tax refund was \$172. This year it was \$747. How much more was this year's refund than last year's refund?

A) \$575

B) \$475

C) \$571

D) \$919

Answer: A

499) The seats in a lecture hall are arranged in 14 rows with 9 seats in each row. How many seats are in this lecture hall?

A) 136 seats

B) 135 seats

C) 126 seats

D) 117 seats

Answer: C

500) In preparation for his new job, Tristan bought two suits at \$159 a piece, six shirts at \$28 a piece, two pairs of shoes at \$72 a piece, and four ties at \$27 a piece. What was the total cost of these items?

A) \$738

B) \$785

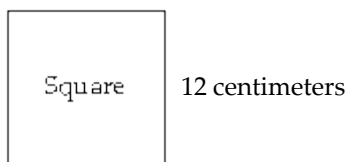
C) \$291

D) \$763

Answer: A

Find the perimeter and the area of the figure.

501)



A) perimeter: 48 cm; area: 576 sq cm

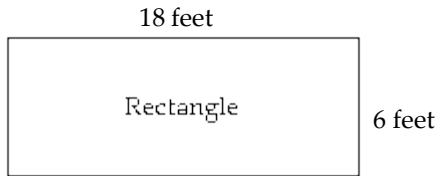
C) perimeter: 48 cm; area: 144 sq cm

B) perimeter: 144 cm; area: 48 sq cm

D) perimeter: 24 cm; area: 144 sq cm

Answer: C

502)



A) perimeter: 48 ft; area: 216 sq ft

C) perimeter: 48 ft; area: 108 sq ft

B) perimeter: 24 ft; area: 108 sq ft

D) perimeter: 108 ft; area: 48 sq ft

Answer: C

Provide an appropriate response.

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

A) 23

B) 123

C) 119

D) 127

Answer: B

504) Evaluate $\frac{7x + 12y}{4}$ for $x = 8$ and $y = 7$.

A) 36

B) 7

C) 140

D) 35

Answer: D

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

505) The quotient of a number and 9

A) $\frac{x}{9}$

B) $x - 9$

C) $\frac{9}{x}$

D) $9x$

Answer: A

506) 6 times a number, decreased by 4

A) $6 - 4x$

B) $4 - 6x$

C) $6x - 4$

D) $4x - 6$

Answer: C

Provide an appropriate response.

507) Is 4 a solution of the equation $4x - 6 = 10$?

A) yes

B) no

Answer: A

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

$$4x - 9 = 56 - 9x; \{0, 5, 10\}$$

A) 0

B) 5

C) none of them

D) 10

Answer: B

Answer Key

Testname: UNTITLED1

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

Answer Key

Testname: UNTITLED1

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

Answer Key

Testname: UNTITLED1

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

Answer Key

Testname: UNTITLED1

151) B

152) B

153) B

154) A

155) D

156) C

157) C

158) D

159) B

160) A

161) C

162) D

163) C

164) D

165)

24,721

- 5190

19,531

166) D

167) A

168) B

169) A

170) C

171) A

172) B

173) A

174) C

175) B

176) D

177) B

178) C

179) C

180) B

181) D

182) A

183) D

184) C

185) A

186) D

187) D

188) D

189) D

190) A

191) D

192) C

193) A

194) B

195) A

196) C

197) A

Answer Key

Testname: UNTITLED1

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

Answer Key

Testname: UNTITLED1

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

Answer Key

Testname: UNTITLED1

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

Answer Key

Testname: UNTITLED1

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

Answer Key

Testname: UNTITLED1

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

Answer Key

Testname: UNTITLED1

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

Answer Key

Testname: UNTITLED1

- 498) A
- 499) C
- 500) A
- 501) C
- 502) C
- 503) B
- 504) D
- 505) A
- 506) C
- 507) A
- 508) B