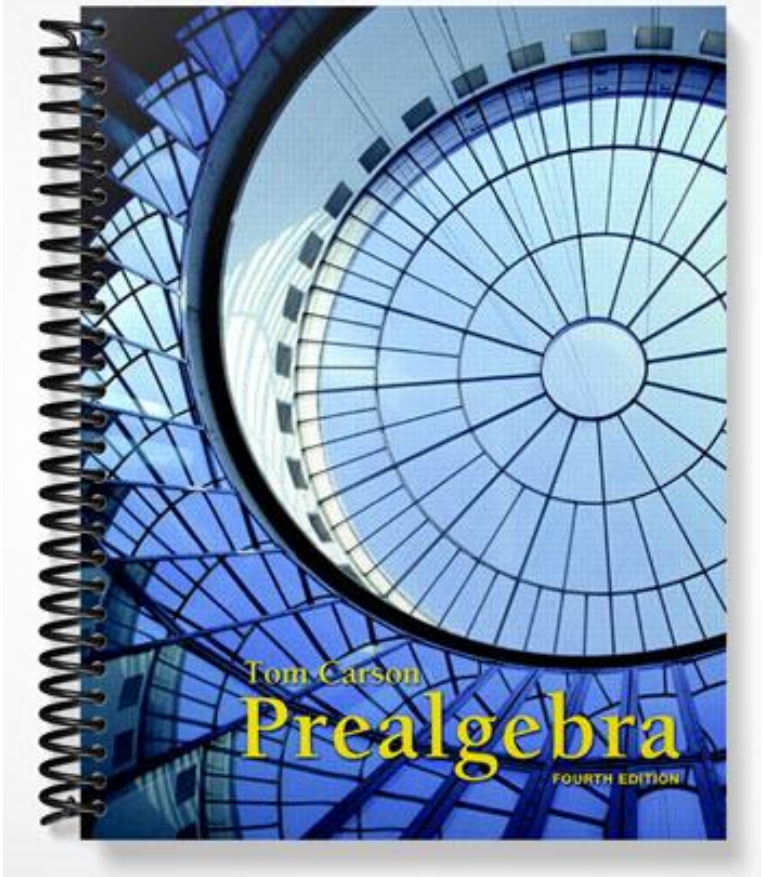
TEST BANK



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

Express the amount as a positive or negative integer.

1) The stock market gained 28 points on Monday. 1) _____
A) -28 B) 28

2) During one year, 20 employees started work at Newline Manufacturing Company. 2) _____
A) -20 B) 20

3) A football team gained 7 yards on one play. 3) _____
A) 7 B) -7

4) In one state, the lowest point is 5233 feet below sea level. 4) _____
A) 5233 B) -5233

5) One country exported $73,000,000 more than it imported, giving it a positive trade balance. 5) _____
A) -73,000,000 B) 73,000,000

6) The sales at Andrea's Formal Wear Shop this week were $1078 more than the sales last week. 6) _____
A) -1078 B) 1078

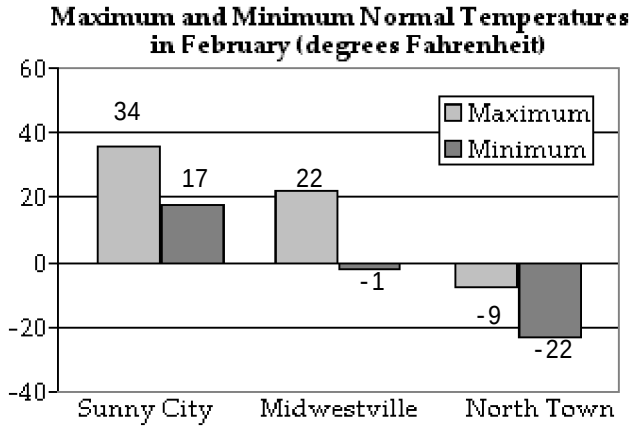
7) Mr. Voss decreased his speed by 19 miles per hour. 7) _____
A) -19 B) 19

8) On a sunny day, the water temperature in the swimming pool rises 8 degrees. 8) _____
A) -8 B) 8

9) This year corn production increased 21,000 pounds on Steve's farm. 9) _____
A) 21,000 B) -21,000

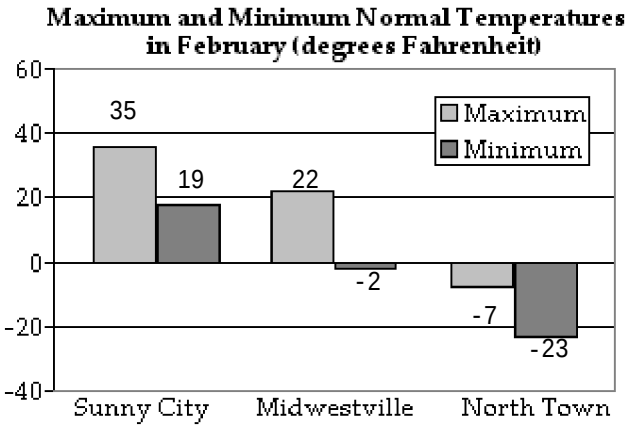
Use the following graph to answer the question.

10) 10) _____



What is the maximum normal February temperature in Sunny City?
A) -9°F B) 34°F C) 17°F D) 22°F

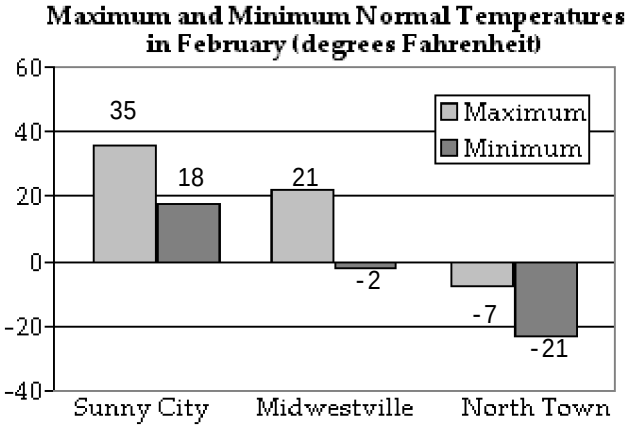
11) 11) _____



What is the minimum normal February temperature in Sunny City?

A) -23°F B) -2°F C) 19°F D) 35°F

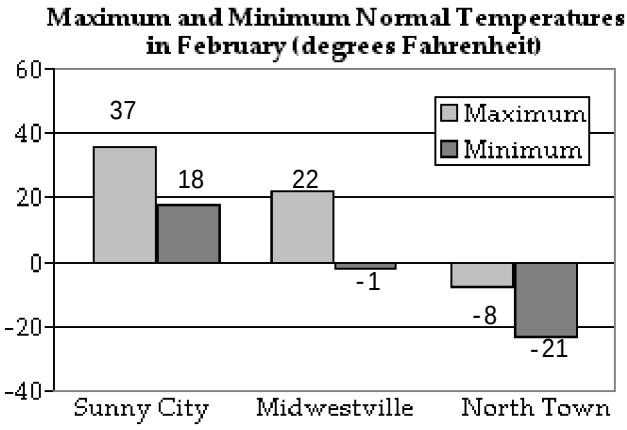
12) 12) _____



What is the maximum normal February temperature in Midwestville?

A) 35°F B) 21°F C) -2°F D) -7°F

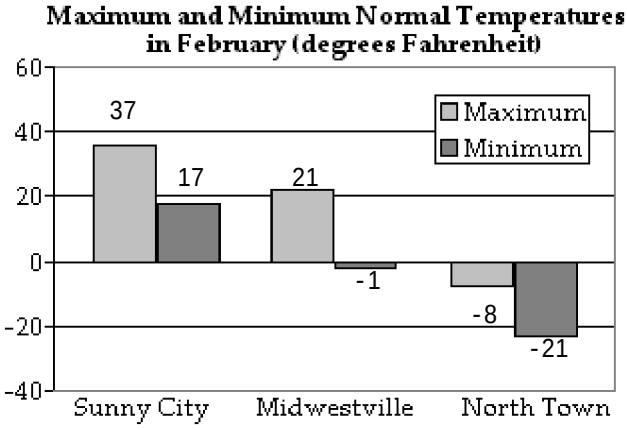
13) 13) _____



What is the minimum normal February temperature in Midwestville?

A) 18°F B) -21°F C) -1°F D) 22°F

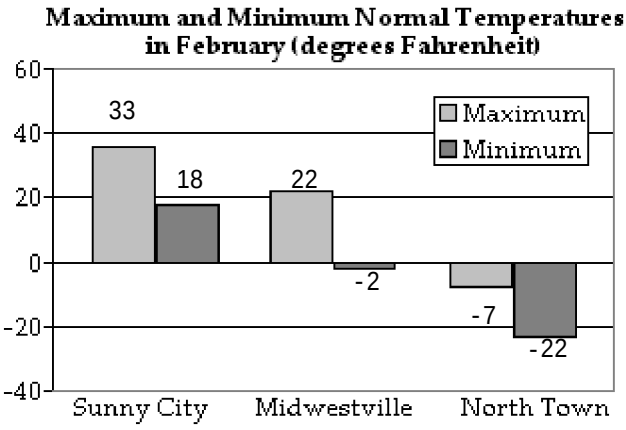
14) 14) _____



What is the maximum normal February temperature in North Town?

A) 37°F B) -21°F C) 21°F D) -8°F

15) 15) _____

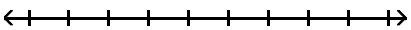


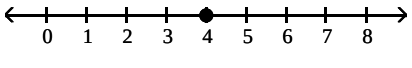
What is the minimum normal February temperature in North Town?

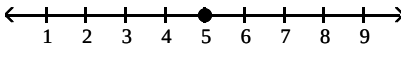
A) 18°F B) -2°F C) -7°F D) -22°F

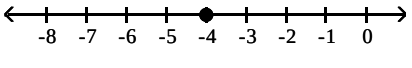
Graph the integer on a number line.

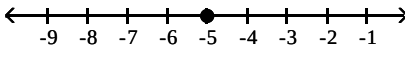
16) 4 16) _____



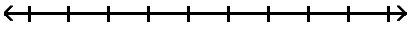
A) 

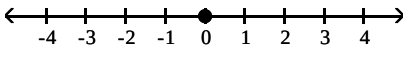
B) 

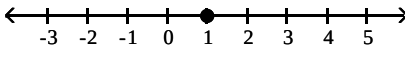
C) 

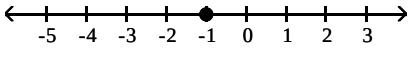
D) 

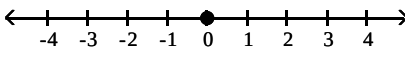
17) -1 17) _____



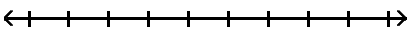
A) 

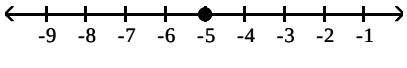
B) 

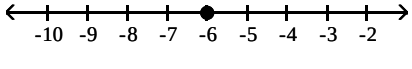
C) 

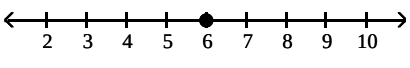
D) 

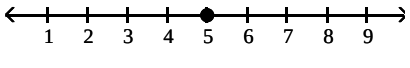
18) -6 18) _____



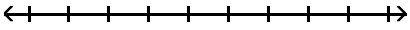
A) 

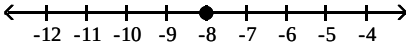
B) 

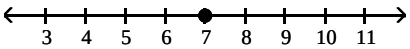
C) 

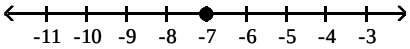
D) 

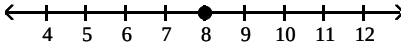
19) 7 19) _____



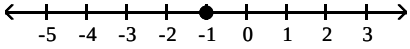
A) 

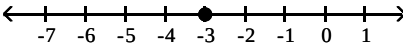
B) 

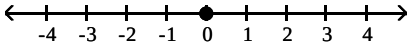
C) 

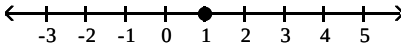
D) 

20) 0 20) _____

A) 

B) 

C) 

D) 

Use < or > to make a true statement.

21) 4 ? 8 21) _____
A) < B) >

22) 6 ? 5 22) _____
A) < B) >

23) 0 ? 8 23) _____
A) < B) >

24) 10 ? 0 24) _____
A) < B) >

25) -10 ? 3 25) _____
A) < B) >

26) 9 ? -6 26) _____
A) < B) >

27) -10 ? -2 27) _____
A) < B) >

28) 0 ? -8 28) _____
A) < B) >

29) -9 ? 0 29) _____
A) < B) >

Complete the sentence.

30) The absolute value of 13 is _____. 30) _____

A) -13 B) 13 C) 0 D) 26

31) The absolute value of -19 is _____. 31) _____

A) -19 B) -38 C) 0 D) 19

32) The absolute value of 85 is _____. 32) _____

A) 0 B) 170 C) -85 D) 85

33) The absolute value of -89 is _____. 33) _____

A) 0 B) 89 C) -178 D) -89

34) The absolute value of 0 is _____. 34) _____

A) -1 B) $\frac{1}{0}$ C) 0 D) 1

Simplify.

35) $|6|$ 35) _____

A) 6 B) -6 C) 0 D) 12

36) $|-11|$ 36) _____

A) 0 B) -22 C) -11 D) 11

37) $|75|$ 37) _____

A) 0 B) 75 C) -75 D) 150

38) $|-82|$ 38) _____

A) -164 B) 82 C) 0 D) -82

39) $|0|$ 39) _____

A) $\frac{1}{0}$ B) -1 C) 1 D) 0

40) $|390|$ 40) _____

A) -190 B) 390 C) -390 D) 290

41) $|-3054|$ 41) _____

A) 1054 B) -3054 C) 3054 D) 2054

Add.

42) $-55 + (-13)$ 42) _____

A) -68 B) 42 C) 68 D) -42

43) $-19 + (-17)$ 43) _____

A) -2 B) 36 C) 2 D) -36

44) 14 + 10 44) _____
A) 24 B) 4 C) -24 D) -4

45) -14 + (-10) 45) _____
A) -4 B) 24 C) 4 D) -24

46) -10 + (-15) 46) _____
A) -26 B) -25 C) 26 D) 25

47) -6 + (-17) 47) _____
A) -24 B) -23 C) 23 D) -11

48) -17 + (-19) 48) _____
A) -36 B) -37 C) -2 D) 36

49) -74 + (-36) 49) _____
A) 110 B) -110 C) 38 D) -112

50) 54 + 35 50) _____
A) 88 B) 91 C) 90 D) 89

51) -89 + (-40) 51) _____
A) 130 B) -129 C) -130 D) 129

52) 7 + (-5) 52) _____
A) -12 B) 2 C) -2 D) 12

53) -6 + 9 53) _____
A) -3 B) -15 C) 15 D) 3

54) 89 + (-37) 54) _____
A) -126 B) -52 C) 126 D) 52

55) -14 + 100 55) _____
A) -114 B) 86 C) 114 D) -86

56) 48 + (-123) 56) _____
A) 75 B) -171 C) 171 D) -75

57) -6 + 10 57) _____
A) -4 B) 16 C) 4 D) -16

58) -6 + 3 58) _____
A) -9 B) 3 C) 9 D) -3

59) 1 + (-1) 59) _____
A) 0 B) -1 C) 2 D) 1

60) $-159 + 145$ 60) _____

A) -304 B) -14 C) 304 D) 14

61) $6 + (-3) + (-22)$ 61) _____

A) -19 B) -13 C) 31 D) 25

62) $2 + 24 + (-23)$ 62) _____

A) 1 B) 49 C) -45 D) 3

63) $-3 + 17 + (-9)$ 63) _____

A) 11 B) 29 C) 5 D) 23

64) $-19 + (-22) + (-5) + (-2)$ 64) _____

A) 34 B) -48 C) 0 D) -10

65) $13 + (-10) + 22 + (-18)$ 65) _____

A) -1 B) 7 C) -37 D) 63

66) $-19 + (-12) + (-5) + (-7) + 20 + (-5)$ 66) _____

A) -68 B) 20 C) -6 D) -28

67) $13 + (-13) + 11 + (-14) + 20 + (-7)$ 67) _____

A) 10 B) -12 C) 14 D) -78

68) $-7 + (-54) + 32 + (-88)$ 68) _____

A) -103 B) 59 C) -181 D) -117

Find the additive inverse.

69) 24 69) _____

A) 0 B) 24 C) 1 D) -24

70) -24 70) _____

A) 1 B) 0 C) 24 D) -24

71) 93 71) _____

A) 0 B) 93 C) 1 D) -93

72) -58 72) _____

A) 1 B) -58 C) 0 D) 58

73) 0 73) _____

A) -1 B) 0 C) 1 D) $\frac{1}{0}$

Solve.

74) In four rounds of a card game, you get scores of -1, 6, -7, and -2. What is your final score? 74) _____

A) -4 B) 4 C) 14 D) -14

75) The temperature at the South Pole station registered 41°F one day. The following day, it registered -32°F. By how many degrees did the temperature drop? 75) _____

A) 9°F B) -9°F C) -73°F D) 73°F

76) A bike road race starts at an elevation of 580 ft. and passes through 5 stages where the elevation increases (decreases) by -164 ft., -522 ft., 588 ft., 379 ft., and 408 ft. At what elevation does the race end? 76) _____

A) 1269 ft. B) 2641 ft. C) -2641 ft. D) 2053 ft.

77) A corporation's bank account has $5620 in it when the treasurer writes checks for $3078, $606, and $4357. Then, deposits of $1208 and $2996 are made. What is the new balance? 77) _____

A) -$9457 B) $9457 C) $6140 D) $1783

78) Jack's checking account was overdrawn by $68. He deposited $45 into his account. What is his new balance? 78) _____

A) -$23 B) $23 C) -$113 D) $113

79) The temperature was 61°F in the morning, but it dropped 19°F in the afternoon and another 5°F in the evening. What was the temperature in the evening? 79) _____

A) 47°F B) 37°F C) -47°F D) -37°F

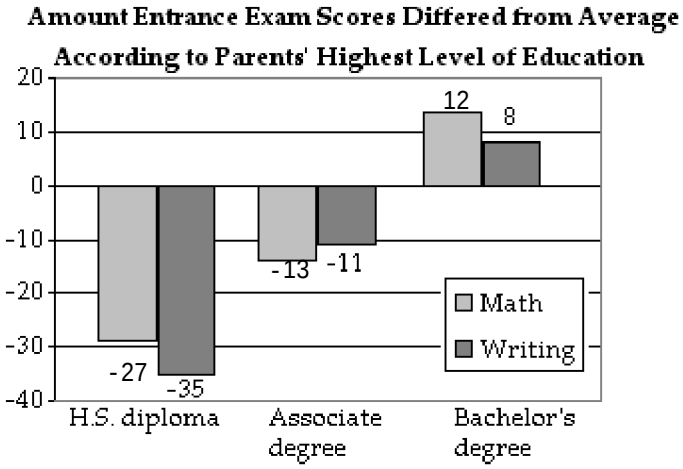
80) Salve opened a new checking account with a $527 deposit. The bank charged her $6 to print her checks. She also wrote a $91 check to buy groceries and a $50 check to pay her phone bill. What is the new balance in her account? 80) _____

A) $674 B) $574 C) $392 D) $380

81) Marco had $454 in his checking account. He wrote a $125 check for his car payment, deposited his $873 paycheck, and then wrote a $564 check for his rent. What is the current balance in his account? 81) _____

A) $638 B) $1766 C) $2016 D) $888

82) Students applying to State University must take an entrance exam. The graph shows the amount the entrance exam scores are above or below the average score according to parental education level. 82) _____



The average math score was 247 last year. Calculate the average math score for a parental education level of bachelor's degree.

A) 255 B) 259 C) 235 D) 239

Write as an equivalent addition statement. (Do not evaluate.)

83) 0 - 3 83) _____

A) 3 + 0 B) 0 + 3 C) 0 + (-3) D) 3 - 0

84) 14 - 12 84) _____

A) 12 + (-14) B) 14 + 12 C) 14 + (-12) D) 12 + 14

85) -23 - 20 85) _____

A) 20 + (-23) B) -43 C) -23 + 20 D) -23 + (-20)

86) 14 - (-20) 86) _____

A) 14 + 20 B) 20 + (-14) C) -20 + (-14) D) 14 + (-20)

87) -16 - (-13) 87) _____

A) -16 + (-13) B) 16 + 13 C) 16 + (-13) D) -16 + 13

88) 25 - (-28) 88) _____

A) -25 + (-28) B) 25 + (-28) C) -25 + 28 D) 25 + 28

89) 0 - (-7) 89) _____

A) 7 B) 0 + (-7) C) 0 + 7 D) -7

Evaluate.

90) 0 - 22 90) _____

A) -22 B) 22 C) 0 D) 220

91) 4 - 12 91) _____

A) -16 B) 8 C) -8 D) 16

92) -3 - 22 92) _____
A) -19 B) 19 C) -25 D) 25

93) 9 - (-20) 93) _____
A) 11 B) -11 C) -29 D) 29

94) -3 - (-13) 94) _____
A) -16 B) -10 C) -3 D) 10

95) -19 - (-14) 95) _____
A) -33 B) -5 C) 5 D) 33

96) 69 - (-56) 96) _____
A) 13 B) -13 C) 125 D) -125

97) 0 - (-9) 97) _____
A) 9 B) 1 C) 0 D) -9

Solve and check.

98) x + 12 = 7 98) _____
A) x = -19 B) x = 19 C) x = 5 D) x = -5

99) 25 + f = -12 99) _____
A) f = 13 B) f = -37 C) f = 37 D) f = -13

100) k + (-28) = 30 100) _____
A) k = -2 B) k = -58 C) k = 58 D) k = 2

101) -14 + n = 20 101) _____
A) n = -34 B) n = 6 C) n = -6 D) n = 34

102) w + 4 = 21 102) _____
A) w = 25 B) w = -17 C) w = -25 D) w = 17

103) c + (-13) = 6 103) _____
A) c = -7 B) c = -19 C) c = 19 D) c = 7

104) z + 9 = -2 104) _____
A) z = 11 B) z = 7 C) z = -7 D) z = -11

105) -11 + h = 10 105) _____
A) h = -1 B) h = -21 C) h = 1 D) h = 21

106) -26 + r = 0 106) _____
A) r = 26 B) r = 0 C) r = 1 D) r = -26

Solve.

107) Stuart has a balance of -$47 in his bank account. To avoid further charges, he must have a balance of $38. What is the minimum he can deposit to avoid further charges? 107) _____

A) $9 B) -$85 C) -$9 D) $85

108) Nikki is fishing from a bank 35 feet above water level. In this location, the fish tend to feed at 45 feet below the surface. How long must Nikki's fish line be to reach the fish? 108) _____

A) 10 ft. B) -10 ft. C) 80 ft. D) -35 ft.

109) Wayne has $17 in his bank account. A check written against his account for $27 arrives at the bank. What is his balance? 109) _____

A) -$44 B) $44 C) -$10 D) $10

110) The revenue for a manufacturing company in 2004 was $76,370 and their total costs were $65,670. What was the net? 110) _____

A) $10,700 B) $142,040 C) -$10,700 D) -$142,040

111) The temperature one day was reported to be 16°F. The next day, it was reported to be -39°F. By how many degrees did the temperature drop? 111) _____

A) 23°F B) -23°F C) 55°F D) -55°F

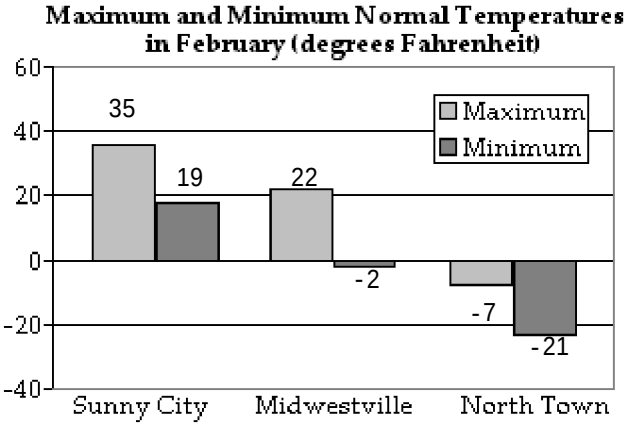
112) In a certain location, the highest temperature recorded was 99°F. The lowest temperature recorded there was 130 degrees lower than the highest. What was the lowest temperature recorded there? 112) _____

A) -138°F B) -31°F C) 31°F D) 0°F

113) The list price of a car is $18,867. The manufacturer offers a rebate of $916. What is the final price of the car? 113) _____

A) $19,783 B) $17,851 C) $17,951 D) $19,683

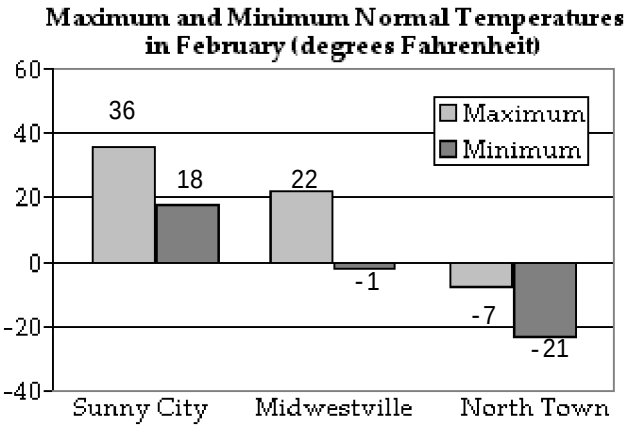
114) 114) _____



Calculate the difference between the maximum and minimum temperature in February for Sunny City.

A) 14°F B) 24°F C) -16°F D) 16°F

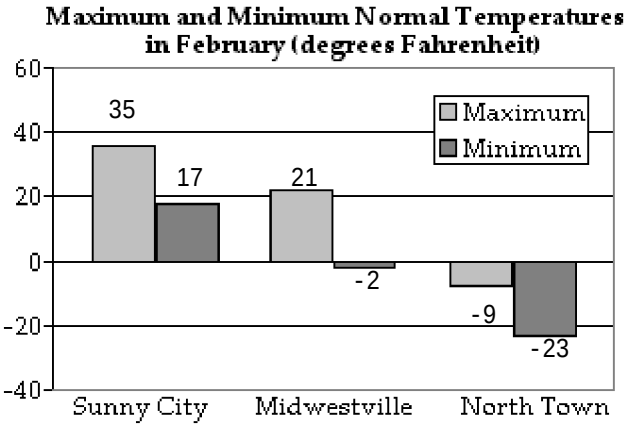
115) 115) _____



Calculate the difference between the maximum and minimum temperature in February for Midwestville.

A) -23°F B) 18°F C) 14°F D) 23°F

116) 116) _____



Calculate the difference between the maximum and minimum temperature in February for North Town.

A) 23°F B) 14°F C) -14°F D) 18°F

Multiply.

117) $3 \cdot (-6)$ 117) _____

A) -18 B) -3 C) 18 D) 3

118) $0 \cdot (-30)$ 118) _____

A) 30 B) 1 C) -30 D) 0

119) $-2 \cdot (-4)$ 119) _____

A) -8 B) 8 C) -6 D) 6

120) $-29 \cdot 0$ 120) _____

A) -29 B) 1 C) 0 D) 29

121) $8(-9)$ 121) _____

A) 72 B) -1 C) 1 D) -72

122) $(-7)(-8)$ 122) _____

A) -56 B) -15 C) 15 D) 56

123) $29 \cdot (-1)$ 123) _____

A) 28 B) -28 C) 29 D) -29

124) $(-20)(-7)$ 124) _____

A) 140 B) 13 C) -140 D) -13

125) $(-1) \cdot (-32)$ 125) _____

A) -33 B) 33 C) -32 D) 32

126) $(3)(-6)(-6)$ 126) _____

A) 108 B) 118 C) -108 D) -36

127) $(-5)(-4)(5)$ 127) _____

A) 90 B) 100 C) 200 D) -100

128) $(-8)(-9)(-4)$ 128) _____

A) -188 B) -298 C) -288 D) 288

129) $(-2)(-2)(-2)$ 129) _____

A) -18 B) -8 C) 8 D) 2

130) $(-2)(-7)(-4)(-2)$ 130) _____

A) 56 B) -112 C) 112 D) 134

131) $(-4)(-3)(10)(-3)(-1)$ 131) _____

A) -360 B) 120 C) 382 D) 360

132) $(1)(-5)(-7)(-3)(3)$ 132) _____

A) -105 B) -315 C) 105 D) 315

133) $-(14)$ 133) _____

A) -1 B) 0 C) -14 D) 14

134) $-(-9)$ 134) _____

A) -1 B) 9 C) -9 D) 0

135) $-(-54)$ 135) _____

A) -1 B) 54 C) -54 D) 0

136) $-(-(49))$ 136) _____

A) 0 B) 49 C) -49 D) -1

137) $-(-(-15))$ 137) _____

A) 1 B) -15 C) $\frac{1}{15}$ D) 15

138) $-(-(-(-23)))$ 138) _____

A) $\frac{1}{23}$ B) -23 C) 1 D) 23

Evaluate.

139) $(-1)^4$ 139) _____

A) 4 B) 1 C) -4 D) -1

140) -3^3 140) _____

A) 81 B) -27 C) -243 D) 27

141) $(-1)^5$ 141) _____

A) -5 B) 5 C) -1 D) 1

142) $(-4)^4$ 142) _____

A) 64 B) -256 C) -1024 D) 256

143) $(-2)^2$ 143) _____

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

144) -2^4 144) _____

A) -16 B) -32 C) 32 D) 16

145) -10^5 145) _____

A) $-100{,}000$ B) 100,000 C) $-10{,}000$ D) 10,000

146) -1^{28} 146) _____

A) -1 B) 28 C) -28 D) 1

Divide.

147) $135 \div (-9)$ 147) _____

A) -25 B) 15 C) 25 D) -15

148) $-52 \div (-4)$ 148) _____

A) -13 B) 13 C) -3 D) 3

149) $-570 \div 95$ 149) _____

A) -6 B) -16 C) 6 D) 16

150) $\frac{-22}{2}$ 150) _____

A) -21 B) 11 C) -11 D) 21

151) $\frac{-287}{-41}$ 151) _____

A) -7 B) 3 C) 7 D) -3

152) $\frac{266}{-14}$ 152) _____

A) -19 B) 19 C) 29 D) -29

153) $-24 \div (-1)$ 153) _____

A) -1 B) Undefined C) 24 D) -24

154) $\frac{0}{9}$ 154) _____

A) Undefined B) -9 C) 0 D) 9

155) $\frac{-2}{0}$ 155) _____

A) 2 B) Undefined C) 0 D) -2

156) $-\frac{72}{12}$ 156) _____

A) -1 B) -6 C) 6 D) 72

Solve and check.

157) $9x = 72$ 157) _____

A) $x = -8$ B) $x = 648$ C) $x = 63$ D) $x = 8$

158) $7a = -63$ 158) _____

A) $a = -9$ B) $a = 70$ C) $a = 1$ D) $a = -70$

159) $-4x = -24$ 159) _____

A) $x = 20$ B) $x = -20$ C) $x = 2$ D) $x = 6$

160) $-6s = -102$ 160) _____

A) $s = -96$ B) $s = 17$ C) $s = 96$ D) $s = 2$

161) $6g = 0$ 161) _____

A) $g = 0$ B) $g = -6$ C) No solution D) $g = 6$

162) $-15d = 0$ 162) _____

A) $d = 15$ B) No solution C) $d = -15$ D) $d = 0$

163) $-1k = 19$ 163) _____

A) $k = 19$ B) $k = -1$ C) $k = -19$ D) $k = 1$

164) $0n = 18$ 164) _____

A) No solution B) $n = 18$ C) $n = -18$ D) $n = 0$

165) $7(-1)t = -28$ 165) _____

A) $t = 7$ B) $t = -7$ C) $t = 4$ D) $t = -4$

166) $(-4)(-1)(7)w = -84$ 166) _____

A) $w = 28$ B) $w = -28$ C) $w = -3$ D) $w = 3$

Find all square roots of the number.

167) 144 167) _____

A) 12 B) ±24

C) ±12 D) no real roots exist

168) -16 168) _____

A) -4 B) ±4

C) ±8 D) no real roots exist

Simplify.

169) $\sqrt{16}$ 169) _____

A) 5 B) 8

C) not a real number D) 4

170) $-\sqrt{225}$ 170) _____

A) - 112 B) - 15

C) 15 D) not a real number

171) $\sqrt{-81}$ 171) _____

A) 9 B) not a real number

C) - 9 D) 40

172) $\sqrt{0}$ 172) _____

A) 0 B) not a real number

C) -1 D) 1

173) $\sqrt{-36}$ 173) _____

A) not a real number B) 6

C) -6 D) 12

Solve.

174) During one difficult year, the Harrisons had insufficient funds in their checkbook on nine occasions, and each time, they were assessed a charge appearing as -$18 on their statement. What were the total insufficient funds charges that year? 174) _____

A) $171 B) -$162 C) $152 D) -$144

175) Gina is buying a used car that has an advertised price of $4000. She is buying the car on credit and must make a down payment of $400 and 36 monthly payments of $114. What is her total payment? 175) _____

A) $4494 B) $4104 C) $4204 D) $4504

176) A television offer advertised a set of knives for $20 down and $6 a month for 12 months. What is the total cost of the knives? 176) _____

A) $72 B) $92 C) $82 D) $102

177) A travel agent arranged a payment plan for a client. It required a down payment of $300 and 15 monthly payments of $501. What was the total cost of the plan? 177) _____

A) $7515 B) $7615 C) $7715 D) $7815

178) A salesperson earns $350 a week plus a bonus of $20 for each service contract sold. What was her pay last week if she sold 3 service contracts? 178) _____

A) $60 B) $510 C) $410 D) $350

179) Jack borrowed $1440 from his brother. Jack's brother wants 12 monthly payments of $135 to repay the loan. How much extra is Jack's brother charging for the loan? 179) _____

A) $45 B) $1620 C) $180 D) $1720

Simplify using order of operations.

180) $9 + 9 \cdot (-6)$ 180) _____

A) -45 B) -108 C) 108 D) 45

181) $81 - 18 \div 9$ 181) _____

A) 7 B) 79 C) -7 D) -79

182) $-2 + 14 + (-8) \cdot 7$ 182) _____

A) 28 B) 44 C) -28 D) -44

183) $160 \div (20 \div 4)$ 183) _____

A) 32 B) 2 C) 155 D) 8

184) $-7 + 6(5 - 9)$ 184) _____

A) -31 B) 4 C) -4 D) 31

185) $9(-4 + 6) - (6 - 9)$ 185) _____

A) 27 B) -21 C) 21 D) -27

186) $-5(4 - 19) \div (-15)$ 186) _____

A) -3 B) 3 C) 5 D) -5

187) $3(-6) + (-6)(-2)$ 187) _____

A) 48 B) 6 C) -6 D) -48

188) $42 \div (-7) - 9 \div (-3)$ 188) _____

A) -3 B) 9 C) 3 D) -9

189) $5 \cdot 6 - 2 \cdot 3 + 7 \cdot 9$ 189) _____

A) -93 B) -87 C) 87 D) 93

190) $2 - 5^2$ 190) _____

A) 9 B) 23 C) -23 D) -9

191) $(7 + 2)^2$ 191) _____

A) 11 B) 51 C) 81 D) 53

192) $5 - (-2) + 2^2$ 192) _____

A) 11 B) 9 C) 7 D) 5

193) $72 \div (-6)^2 + (-7)$ 193) _____

A) 9 B) -5 C) -9 D) 5

194) $5 - (-6) \cdot (-8)^3$ 194) _____

A) 3067 B) 5632 C) -5632 D) -3067

195) $5 \cdot 6^2 - 2(4 + 8) - (-7)$ 195) _____

A) 3382 B) -149 C) -3382 D) 163

196) $(-12)^2 \cdot (4 - 7)^2 \div 3^3$ 196) _____

A) 64 B) -48 C) 48 D) -64

197) $4^2(4 - 6)(-4) \cdot (-7)^3$ 197) _____

A) -219,520 B) 43,904 C) -43,904 D) 219,520

198) $(15 - 10)^2 + (5 + 2)^2$ 198) _____

A) 74 B) 54 C) 144 D) 154

199) $3 \cdot (2 + 2)^2 - 4 \cdot (6 - 3)^2$ 199) _____

A) 396 B) 12 C) 28 D) 0

200) $\sqrt{25 - 16}$ 200) _____

A) 6 B) 5 C) 3 D) 1

201) $\sqrt{36} - \sqrt{16}$ 201) _____

A) 10 B) 4 C) 24 D) 2

202) $9 \div (-3) + \sqrt{9} + (-2)^3$ 202) _____

A) 27 B) -1 C) -2 D) -8

203) $36 - 4^2 + (-10) \div \sqrt{25}$ 203) _____

A) 50 B) 22 C) 2 D) 18

204) $(-5)^3 + 4\sqrt{25} - 8 \div 2$ 204) _____

A) -101 B) -56 C) -109 D) 141

205) $-6\sqrt{36} + |22 \div (-11)| - (26 - 10)$ 205) _____

A) -18 B) -70 C) -50 D) -41

206) $|-10(-4) - 8| + \sqrt{(4)(16)} - (24 - 13)$ 206) _____

A) 28 B) 29 C) 45 D) 3

207) $5^3 - [4 + 4\sqrt{25 - 16}] + 26 - 9$ 207) _____

A) 134 B) 142 C) 74 D) 126

208) $|-63| \div (-7) \cdot |-4|$ 208) _____

A) -9 B) 36 C) -36 D) 9

209) $|-45| \div 5 \cdot (-|7|) \cdot |8|$ 209) _____

A) -9 B) -504 C) 504 D) 9

210) $-9 \cdot (-|28|) \div 4 \cdot (-|5|)$ 210) _____

A) 315 B) -7 C) 7 D) -315

211) $-|54| \div (-|9|) \div (-2)$ 211) _____

A) 12 B) -12 C) -3 D) 3

212) $-|108| \div (-|9|) \div (-6) \cdot 10 \div (-|-5|)$ 212) _____

A) 4 B) -144 C) -4 D) 144

213) $|-42| \div 6 + 7 \cdot |(-7)^3| \div 49$ 213) _____

A) -91 B) 91 C) 56 D) -56

214) $5 - |5 - 9 \cdot 6| + (-6)^2 \div 6^2$ 214) _____

A) -43 B) 48 C) -48 D) 43

215) $-|49 - 8 \cdot 4| + 30 \div (7 - (-3)) - 3^2$ 215) _____

A) 11 B) -29 C) -23 D) 23

216) $-5\{16 - 8 \cdot |1 - 8(3)|\} + [(2)(-4) - (-11)]^3$ 216) _____

A) -813 B) 867 C) 53 D) -973

217) $2^5 - [14 + 5\sqrt{15 - 6}] + |28 - 25|^3$ 217) _____

A) 23 B) 88 C) 30 D) 25

218) $\dfrac{-16 + 5^2 - (-15)}{-24 - 9 + 36}$ 218) _____

A) 11 B) -11 C) -8 D) 8

219) $\dfrac{-4 + 3^2 - (-10)}{3 - 3 + 5}$ 219) _____

A) -5 B) 3 C) 5 D) -3

220) $\dfrac{-5(7^2) - 7(5 - 2)}{-7(4 - 7) \div (-3)}$ 220) _____

A) -38 B) 38 C) -42 D) 42

221) $\frac{6^3 \cdot (-4 - 5) - 2(-2)}{93 + 7(-2 \cdot 7) + (2 \cdot 2)}$ 221) _____

A) 320 B) 1940 C) -1940 D) -320

222) $\frac{-\left|15 - 3^2\right|^2}{2(-8) + 12}$ 222) _____

A) 18 B) 15 C) -18 D) 9

223) $\frac{1 + \left|4(9 - 14)\right| + 3}{22 - 8 - 3^3 + 19}$ 223) _____

A) 15 B) 8 C) -1 D) 4

Provide an appropriate response.

224) Explain the difference between $(-9)^4$ and -9^4. 224) _____

A) $(-9)^4$ does not evaluate to an integer, but -9^4 does.

B) In $(-9)^4$, the negative sign is raised to the fourth power along with 9. In -9^4, only 9 is raised to the fourth power.

C) In $(-9)^4$, only 9 is raised to the fourth power. In -9^4, the negative sign is raised to the fourth power along with 9.

D) There is no difference.

225) Explain the difference between $-(-6)^2$ and $[-(6)]^2$. 225) _____

A) $-(-6)^2$ has two negative signs, so it evaluates to a positive number. $[-(6)]^2$ has only one negative sign, so it evaluates to a negative number.

B) In $-(-6)^2$ the first negative sign is not included in the squaring operation, but in $[-(6)]^2$ the negative sign is included. $-(-6)^2$ evaluates negative and $[-(6)]^2$ evaluates positive.

C) There is no difference.

D) $-(-6)^2$ evaluates negative, but $[-(6)]^2$ is impossible to calculate.

226) Why do $(-4)^5$ and -4^5 both evaluate to -1024? 226) _____

A) Because parentheses do not affect the solution when evaluating exponents

B) Because the exponent is odd

C) Because any number raised to the fifth power is negative

D) They do not both evaluate to -1024. One is 1024.

227) Why is the answer to the following operation undefined? 227) _____

$[(-14 + 4) + 7] \div 0 + 7^4 \cdot 6$

A) Because it includes a negative radical

B) Because it includes a division by an exponential number

C) Because it includes a division by 0

D) The answer to the operation is not undefined.

228) Explain the mistake in the following problem: 228) _____

$27 - 4(34 - 40)$
$= 27 - 4(-6)$
$= 23(-6)$
$= -138$

A) 23 multiplied by -6 does not equal -138.
B) 4 should be multiplied by -6 before subtraction from from 27.
C) -6 multiplied by -4 equals 24. Therefore, the final step should be 23(24).
D) The problem cannot be worked since (34 - 40) is negative.

229) Explain the mistake in the following problem: 229) _____

$26 \div 2 \cdot 4 + 6$
$= 26 \div 2 \cdot 10$
$= 13 \cdot 10$
$= 130$

A) There is no mistake.
B) 2 needs to be multiplied by 10 before division can take place.
C) The mistake is in adding first.
D) The mistake is in multiplying first.

230) Explain the mistake in the following problem: 230) _____

$4 - (10 - 3)^2$
$= 4 - (10 - 9)$
$= 4 - 1$
$= 3$

A) There is an addition error.
B) The exponent should be distributed through the numbers in the parentheses.
C) The expression within the parentheses should have been evaluated first.
D) -3 squared should be 9, not -9.

231) Explain the mistake in the following problem: 231) _____

$21 - (-2)^5$
$= 21 - 32$
$= -11$

A) 2^5 is not 32.
B) There is no mistake.
C) There is a subtraction error.
D) $(-2)^5$ is -32, not 32.

232) Explain the mistake in the following problem: 232) _____

$-3[14(4 - 5) + 8]$
$= -3[14(-1) + 8]$
$= -3[-14 + 8]$
$= -3[-6]$
$= 18$

A) There is no mistake.
B) The second step should be to perform the operation (-1) + 8.
C) The first step should be to perform the operation (4 - 5) + 8.
D) The answer should be negative.

Solve.

233) Jimmy put $700 down on a new sports car. He made 56 payments of $231 and spent $912 in maintenance and repairs. Three years after paying off the car he sells it for $4830. What is his net? Is it a profit or loss? 233) _____

A) -$9718; profit B) $9718; profit C) $2931; loss D) -$9718; loss

234) In 1994, Bethany put $540 down on a new Jeep. She made 57 payments of $236 and spent $544 in maintenance and repairs. Four years after paying off the car she sells it for $4190. What is her net? Is it a profit or loss? 234) _____

A) -$10,346; profit B) -$10,346; loss C) $2813; loss D) $10,346; profit

235) Margaret takes out a loan to buy a fixer-upper house. She then spends $3046 in repairs and improvements. She sells the house for $89,210. If the payoff amount for the loan that she took out to buy the house is $74,656, what is her net? Is it a profit or loss? 235) _____

A) $17,600; profit B) $166,912; profit C) -$17,600; loss D) $11,508; profit

236) Kimberly Ann takes out a loan to buy a fixer-upper house. She then spends $3754 in repairs and improvements. She sells the house for $85,660 but pays the new owners $2276 in closing costs. If the payoff for the loan that Kimberly Ann took out to buy the house is $74,072, what is her net? Is it a profit or loss? 236) _____

A) $5558; profit B) -$71,796; profit

C) -$161,215; profit D) -$161,210; loss

237) Ms. Steiner takes out a loan to buy a fixer-upper house. She then spends $4576 in repairs and improvements. She sells the house for $87,550 but pays the new owners $2740 in closing costs. If the payoff for the loan that she took out to buy the house is $70,012, what is her net? Is it a profit or loss? 237) _____

A) $10,222; profit B) $15,702, profit C) $10,217; profit D) -$159,398; loss

238) An electrical circuit has a resistance of 3 ohms and a current of -7 amps. Find the voltage. 238) _____

A) 21 V B) -21 V C) -10 V D) -22 V

239) An electrical circuit has a resistance of 84 ohms and a current of 10 amps. Find the voltage. 239) _____

A) 94 V B) 840 V C) -840 V D) 843 V

240) The voltage in an electrical circuit measures -280 volts. If the resistance is 40 ohms, find the current. 240) _____

A) 280 A B) -7 A C) -280 A D) 47 A

241) It is suspected that an incorrect resistor was put into a circuit. The correct resistor should be 42 ohms. A voltage measurement is taken and found to be 378 volts. The current is measured to be 9 amps. Is the resistor correct? 241) _____

A) Yes B) No

242) It is suspected that an incorrect resistor was put into a circuit. The correct resistor should be 37 ohms. A voltage measurement is taken and found to be 333 volts. The current is measured to be 7 amps. Is the resistor correct? 242) _____

A) No B) Yes

243) An elevator in a downtown skyscraper travels from the lobby to the 88th floor, a distance of about 968 feet, in about 44 seconds. What is the average rate of the elevator? 243) _____

A) 4 ft. per sec. B) 24 ft. per sec. C) 22 ft. per sec. D) 44 ft. per sec.

244) A research submarine is lowered at an average rate of 8 feet per second. What will be the submarine's depth after 30 seconds? 244) _____

A) 4 ft. B) 480 ft. C) 240 ft. D) 265 ft.

245) A ship travels at an average rate of 21 miles per hour. How far will the ship go in 7 hours? 245) _____

A) 147 mi. B) 139 mi. C) 159 mi. D) 3 mi.

Answer Key
Testname: UNTITLED2

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

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

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

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

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