ANSWER KEY AND EXPLANATIONS

Verbal Skills

1. **C**	13. **D**	25. **D**	37. **C**	49. **A**
2. **A**	14. **C**	26. **C**	38. **C**	50. **D**
3. **D**	15. **C**	27. **D**	39. **C**	51. **B**
4. **B**	16. **A**	28. **B**	40. **B**	52. **B**
5. **D**	17. **B**	29. **D**	41. **D**	53. **B**
6. **D**	18. **C**	30. **D**	42. **A**	54. **B**
7. **A**	19. **A**	31. **A**	43. **D**	55. **A**
8. **D**	20. **B**	32. **A**	44. **C**	56. **B**
9. **B**	21. **A**	33. **A**	45. **C**	57. **D**
10. **A**	22. **C**	34. **D**	46. **D**	58. **A**
11. **D**	23. **D**	35. **B**	47. **A**	59. **B**
12. **C**	24. **A**	36. **D**	48. **C**	60. **B**

1. **The correct answer is (C).** is a general classification. The other choices are objects that tell time.

2. **The correct answer is (A).** and are synonyms.

3. **The correct answer is (D).** Cause-effect relationship. The effect of lightening red is pink; the effect of lightening black is gray.

4. **The correct answer is (B).** Because the first two statements are true and Karen reads faster than Ann, she must also read faster than Sue.

5. **The correct answer is (D).** means to bring into existence or to invent.

6. **The correct answer is (D).** Noun-adjective relationship.

7. **The correct answer is (A).** is a general classification. The other choices are examples of good qualities.

8. **The correct answer is (D).** Part-whole relationship. Sand is part of the beach; black dirt is part of a farm.

9. **The correct answer is (B).** is a general classification. The other choices are measures of time.

10. **The correct answer is (A).** A is an amphibian resembling a lizard.

11. **The correct answer is (D).** means proud or haughty.

12. **The correct answer is (C).** Cause-effect relationship. Rounding the corners of a square produces a circle; rounding the corners of a rectangle produces an oval.

13. **The correct answer is (D).** Part-whole relationship. 1 is half of 2; 3 is half of 6.

14. **The correct answer is (C).** is a function. The others are general classifications of symbols.

15. **The correct answer is (C).** From the first two statements, it is only certain that Peter is the shortest of the three boys. The relationship between Paul and John cannot be determined.

16. **The correct answer is (A).** A fruit is one that is tender and sweet.

17. **The correct answer is (B).** Other synonyms for are insubstantial, delicate, or tenuous.

18. The correct answer is (C). _____ means to treat with extreme care.

19. The correct answer is (A). Object-purpose relationship. The purpose of a lamp is to give light; the purpose of a furnace is to give heat.

20. The correct answer is (B). Object-purpose relationship. The purpose of a director is to lead a choir; the purpose of a coach is to lead a team.

21. The correct answer is (A). _____ means to give variety to.

22. The correct answer is (C). The first two statements indicate no relationship between Harry and Ralph; therefore, the third statement is uncertain.

23. The correct answer is (D). A _____ wound is a surface wound.

24. The correct answer is (A). From the first two statements, it is known that B is south of A. Because C is south of B, it must also be south of A.

25. The correct answer is (D). A _____ child is one who is advanced in development.

26. The correct answer is (C). A _____ remark is intended to inflict pain.

27. The correct answer is (D). A _____ is only one part of a school, university, or college.

28. The correct answer is (B). _____ means to shorten or to cut off.

29. The correct answer is (D). A _____ complexion is of a sickly yellowish hue.

30. The correct answer is (D). An _____ person is impoverished.

31. The correct answer is (A). Part-whole relationship. A leg is a part of a table on which the table rests; a wheel is a part of a car on which the car rests.

32. The correct answer is (A). A _____ is a place where people may be forced to stay. The other choices are places in which people choose to live.

33. The correct answer is (A). Because the first two statements are true, all tumps are a part of a larger set of boscs with wings. Blue boscs have no wings; therefore, they cannot be tumps, nor can tumps be blue.

34. The correct answer is (D). _____ is a general classification. The other choices describe specific types or places of punishment.

35. The correct answer is (B). _____ means to decline; the opposite is _____.

36. The correct answer is (D). Object-user relationship. Ink is used in a pen when applied; paint is used on a brush when applied.

37. The correct answer is (C). _____ means to gain possession of; the opposite is _____.

38. The correct answer is (C). Though the first two statements are considered true, they do not provide any information as to the direct relationship between rivers A and C.

39. The correct answer is (C). _____ means meager; the opposite is _____.

40. The correct answer is (B). _____ means peak; the opposite is _____.

41. The correct answer is (D). Part-whole relationship. The captain is the part of a team that guides the team; the manager is the part of an office that guides the office.

42. The correct answer is (A). A window may be covered by the other three choices.

43. The correct answer is (D). _____ means obese; the opposite is _____.

44. The correct answer is (C). _____ means artless; the opposite is _____.

45. The correct answer is (C). A glove is a hand covering; all the other choices are head coverings.

46. The correct answer is (D). A podium is positioned at the front of an auditorium or theater. The other choices represent those who face the podium.

47. The correct answer is (A). To is to promise.

48. The correct answer is (C). A is a low spot or a the opposite is a

49. The correct answer is (A). Because the first two statements are true and all the fruits cost more than apples, apples must cost the least.

50. The correct answer is (D). A fir tree is an evergreen; all of the other trees are deciduous, losing their leaves.

51. The correct answer is (B). means to decrease; the opposite is

.

52. The correct answer is (B). Because the first two statements are true, Jay's batting average must be higher than Tom's.

53. The correct answer is (B). means to give up; the opposite is .

54. The correct answer is (B). is an attribute of abstract things or ideas. The other choices are generally attributes applied to concrete objects.

55. The correct answer is (A). Because the first two statements are true and C is north of A, it must also be north of B.

56. The correct answer is (B). Cotton is a vegetable product; leather, wool, and fur are animal products.

57. The correct answer is (D). A is a type of closing. The other choices are things for opening and closing.

58. The correct answer is (A). means to grow smaller.

59. The correct answer is (B). Oxygen, helium, and gold are elements; water is a compound of hydrogen and oxygen.

60. The correct answer is (B). Because the first two statements are true and the third statement is in direct opposition to the first, it cannot be true.

Quantitative Skills

61. A	72. C	83. B	93. B	103. A
62. D	73. A	84. A	94. A	104. A
63. D	74. B	85. D	95. C	105. B
64. C	75. C	86. B	96. D	106. D
65. D	76. A	87. B	97. C	107. B
66. B	77. C	88. C	98. B	108. C
67. C	78. D	89. D	99. A	109. B
68. D	79. D	90. B	100. D	110. A
69. B	80. C	91. A	101. C	111. D
70. D	81. B	92. C	102. A	112. A
71. A	82. D			

61. The correct answer is (A). Start by finding 20% of 40: $.20 \times 40 = 8$. Then add 3: $8 + 3 = 11$.

62. The correct answer is (D). The pattern in this series is made by adding 7 to each number.

63. The correct answer is (D). The pattern in this series is made by subtracting 9 from each number.

64. The correct answer is (C). Determine the amount of money for (A), (B), and (C). Then test the alternatives given to see which is correct.

65. The correct answer is (D). The correct answer is (A) is .625; (B) is .571; (C) is .6237. Clearly (B) is less than both (A) and (C), which are not equal to each other.

66. The correct answer is (B). The cube of 5 is 125. 125 divided by 5 = 25.

67. The correct answer is (C). The sum of $7 + 18 + 5 + 39 + 11 = 80$. $80 \div 5 = 16$. $\frac{1}{2}$ of 16 = 8.

68. The correct answer is (D). Determine how much of each box is shaded. Then test each alternative to see which is correct.

69. The correct answer is (B). The pattern in this series is $+3, +7, +3, +7$, and so on.

70. The correct answer is (D). Determine the amounts for (A), (B), and (C). Then test each alternative to see which is correct.

71. The correct answer is (A). The pattern in this series is $+1, \times 2, +1, \times 2$, and so on.

72. The correct answer is (C). The pattern in this series is $+6, -3, -1, +6, -3, -1$, and so on.

73. The correct answer is (A). Start this problem from the end and work forward:

$$\frac{3}{5} \times \frac{25}{1} = 15$$
$$15 + 7 = 22$$

The number you're looking for is found by setting up an equation.
$$30 - \underline{\quad} = 22$$
$$\underline{\quad} = 30 - 22$$
$$\underline{\quad} = 8$$

74. The correct answer is (B). Begin with $\frac{1}{3}$ of 18:
$$\frac{1}{3} \times \frac{18}{1} = 6.$$
Then, $6 + 5 = 11$.

75. The correct answer is (C). First determine the amounts of (A), (B), and (C). Then test each alternative to see which is true.

76. The correct answer is (A). The pattern in this series is $-9, -8, -7, -6$, and so on.

77. The correct answer is (C). Count the circles in (A), (B), and (C). Test each alternative to find the one that is true.

78. The correct answer is (D). Determine how much of each figure is shaded. Then test each alternative to find the one that is true.

79. The correct answer is (D). The pattern in this series is made by adding 4 to each number.

80. The correct answer is (C). Determine $\frac{1}{5}$ of 100: $\frac{1}{5} \times \frac{100}{1} = 20$. Multiply this result by 4 to find the answer: $20 \times 4 = 80$.

81. The correct answer is (B). The pattern in this series is $+4, +1, +4, +1$, and so on. Also, whenever 1 is added, the result is expressed as an Arabic numeral; whenever 4 is added, the result is expressed as a Roman numeral.

82. The correct answer is (D). Determine the amounts for (A), (B), and (C). Then test each alternative to find the one that is true.

83. The correct answer is (B). First find 7 times 3: $7 \times 3 = 21$. Double this result to find the answer: $2 \times 21 = 42$.

84. The correct answer is (A). Each box is shaded by $\frac{1}{2}$. Therefore, only (A) can be true.

85. The correct answer is (D). Figure this problem from the end and work forward:

$$5 \times 2 = 10$$
$$3 \times 10 = 30$$
$$6 + \quad = 30$$
$$\quad = 30 - 6 = 24$$

86. The correct answer is (B). The pattern in this series is $-2, + 4, -2, + 4$, and so on.

87. The correct answer is (B). Change (A), (B), and (C) so that they are all the same form—either all fractions, decimals, or percents. Then test each alternative to see which is true.

88. The correct answer is (C). You can figure out this problem with algebra:

$$\frac{3}{4} \times \quad = 6 \times 4$$
$$\frac{3}{4} \times \quad = 24$$
$$\quad = \frac{24}{1} \times \frac{4}{3}$$
$$\quad = 32$$

89. The correct answer is (D). The pattern in this series is $+2, \times 2, +2, \times 2$, and so on.

90. The correct answer is (B). The pattern in this series is $+1, +3, +3, +1, +3, +3, +1$, and so on.

91. The correct answer is (A). The line drawn from point A to the base of triangle ABD divides this triangle into two right triangles, one of which is $\angle$ACD. AD is the hypotenuse of this right triangle whose length must be greater than the length CD, the base of $\angle$ACD.

92. The correct answer is (C). Begin by subtracting 5 from 29. This number divided by 3 will provide the answer:

$$29 - 5 = 24$$
$$24 \div 3 = 8$$

93. The correct answer is (B). The pattern in this series is $+6, +3, +6, +3$, and so on.

94. The correct answer is (A). Determine the amounts for (A), (B), and (C). Then choose the best alternative. Be sure to do the operations in the parentheses first when figuring.

95. The correct answer is (C). The pattern in this series is $+1, -10, +1, -10$, and so on.

96. The correct answer is (D). Because the figure is a cube, all edges and sides are equal. When a diagonal line is drawn across one side, like CF, it forms a hypotenuse of a right triangle whose length is longer than the length of either of its sides (CE and EF). Because the sides of the cube are all equal, CF must also be longer than AB.

97. The correct answer is (C). This can be done with algebra. If   is the number you are looking for:

$$\div 2 = 6 + 4$$
$$2(\quad \div 2) = (6 + 4)2$$
$$\quad = 20$$

98. The correct answer is (B). Perform the multiplications as indicated to arrive at these values:

(A) $= 5 \quad + 5$
(B) $= 5 \quad +$
(C) $= 5 + 5 \quad + \quad = 6 \quad + 5$

It can now be seen that (B) has the least value, (C) has the greatest value, and (A) has a value between these. Therefore, choice (B) is the correct answer.

99. The correct answer is (A). The pattern in this series is $\times 2, +4, \times 2, +4$, and so on.

100. The correct answer is (D). To begin, find $\frac{1}{4}$ of 20. This is the same as saying $20 \div 4$, which equals 5. If   is the number you are looking for:

$$7 -   = 5$$
$$ = 2$$

101. The correct answer is (C). The pattern for the letters in this series is made by using every other letter starting with A. The pattern for the numbers is $+4$, -10, $+4$, -10, and so on.

102. The correct answer is (A). Determine the values for each bar in the graph by using the number scale to the left. Then choose the correct alternative.

103. The correct answer is (A). This can be set up as an algebraic equation. If   is the number you are looking for:

$$ = \frac{3}{5}(10) - 2$$
$$ = 6 - 2$$
$$ = 4$$

104. The correct answer is (A). The pattern in this series is made by taking numbers in sequential order (4, 5, 6, and so on) and following each number with its square.

105. The correct answer is (B). Determine the amounts for (A), (B), and (C). Then, decide which alternative is true.

(A) $5^2 = 25$
(B) $4^3 = 64$
(C) $2^4 = 16$

106. The correct answer is (D). The pattern in this series is made by subtracting $2\frac{1}{2}$ from each number.

107. The correct answer is (B). Begin by figuring $\frac{1}{2}$ of 20. This number multiplied by 8 will provide the answer:

$$\frac{1}{2} \times 20 = 10$$
$$8 \times 10 = 80$$

108. The correct answer is (C). The pattern in this series is $+4$, -2, -1, $+4$, -2, -1, and so on.

109. The correct answer is (B). This can be set up as an algebraic equation. If   is the number you are looking for:

$$6 + \frac{1}{3}   = 2 \times 9$$
$$6 + \frac{1}{3}   = 18$$
$$\frac{1}{3}   = 12$$
$$ = 36$$

110. The correct answer is (A). Test each of the alternatives to find the true one. To find the perimeter, add the length of all four sides together: $2 + 3 + 2 + 3 = 10$

111. The correct answer is (D). This can be set up as an algebraic equation. If   is the number you are looking for:

$$ = \frac{4}{9}(27) + 10$$
$$ = 12 + 10$$
$$ = 22$$

112. The correct answer is (A). First figure 4 squared. The number 7 less than 16 is 9:

$$4^2 = 4 \times 4 = 16$$
$$16 - 7 = 9$$

Reading

COMPREHENSION

113. **B**	121. **C**	129. **D**	137. **D**	145. **A**
114. **C**	122. **C**	130. **C**	138. **B**	146. **A**
115. **C**	123. **C**	131. **B**	139. **A**	147. **B**
116. **D**	124. **A**	132. **D**	140. **A**	148. **A**
117. **D**	125. **D**	133. **D**	141. **D**	149. **B**
118. **C**	126. **B**	134. **B**	142. **D**	150. **D**
119. **B**	127. **C**	135. **D**	143. **B**	151. **A**
120. **D**	128. **C**	136. **A**	144. **C**	152. **A**

113. **The correct answer is (B).** See sentence 6.

114. **The correct answer is (C).** See sentence 1.

115. **The correct answer is (C).** This is an inferential question. Based on sentence 7, we know that both the speed and direction of earthquake waves vary. We do not know from this information if choice (A) is true, so we must assume that (C) is the best answer.

116. **The correct answer is (D).** Because of the nature of the information, it would be found in both sources mentioned.

117. **The correct answer is (D).** This answer is determined by the entire passage, which describes the layers in order. The answer can be verified by eliminating choices (A), (B), and (C).

118. **The correct answer is (C).** most closely means

119. **The correct answer is (B).** This is an inferential question. Though not specifically stated, the answer can be assumed based on sentence 2 and the phrase "appears to be."

120. **The correct answer is (D).** See the last sentence of the paragraph.

121. **The correct answer is (C).** In this passage,   most nearly means a
.

122. **The correct answer is (C).** most closely means

123. **The correct answer is (C).** This answer may be verified by eliminating choices (A), (B), and (D). Though rocks are mentioned, they are only a part of the entire description.

124. **The correct answer is (A).** In this case,   most nearly means

125. **The correct answer is (D).** This answer may be verified by eliminating choices (A), (B), and (C). A clue to the answer is the way the passage is written—without technical terms and in the third person.

126. **The correct answer is (B).** This is an inferential question. The answer may be verified by eliminating the other choices.

127. **The correct answer is (C).** This is the most specific, direct answer, though the other choices may have been indirectly related. The answer is found in paragraph 2.

128. **The correct answer is (C).** See paragraph 2, sentence 4.

129. **The correct answer is (D).** most nearly means

130. **The correct answer is (C).** This is an inferential question. The answer may be verified by eliminating the other choices. See paragraphs 3 and 4.

131. **The correct answer is (B).** Though the author mentions bats, the passage covers the more general topic of spelunkers.

132. **The correct answer is (D).** The answer may be verified by eliminating the other choices.

133. **The correct answer is (D).** See paragraph 2, sentence 2.

134. **The correct answer is (B).** The answer may be verified by eliminating the other choices.

135. **The correct answer is (D).** See paragraph 3.

136. **The correct answer is (A).** See paragraph 1.

137. **The correct answer is (D).** In the passage,   means

138. **The correct answer is (B).** See paragraph 3, sentence 3.

139. **The correct answer is (A).** This answer may be verified by eliminating the other three choices.

140. **The correct answer is (A).** See paragraph 4.

141. **The correct answer is (D).** In this passage,   most nearly means

142. **The correct answer is (D).** This answer may be verified by eliminating the other three choices.

143. **The correct answer is (B).** This answer may be verified by eliminating the other three choices. It covers several aspects of the topic—more than would be contained in just one type of book.

144. **The correct answer is (C).** See paragraph 1.

145. **The correct answer is (A).** This is a question based on your general knowledge.

146. **The correct answer is (A).** See paragraph 2.

147. **The correct answer is (B).** This answer is actually testing your vocabulary.

148. **The correct answer is (A).** See paragraph 3.

149. **The correct answer is (B).** As it is used in the passage,   most closely means   .

150. **The correct answer is (D).**   is the best answer; it could be substituted for   .

151. **The correct answer is (A).** This is an inferential question. The answer is implied in paragraph 3.

152. **The correct answer is (A).** This answer may be verified by eliminating the other choices.

VOCABULARY

153. **D**	158. **A**	163. **A**	167. **A**	171. **A**
154. **B**	159. **D**	164. **B**	168. **D**	172. **B**
155. **A**	160. **D**	165. **D**	169. **A**	173. **D**
156. **A**	161. **A**	166. **A**	170. **C**	174. **C**
157. **C**	162. **D**			

153. **The correct answer is (D).**
       means "aspect," "attitude," or "view."

154. **The correct answer is (B).** To
       is to "spoil," "damage," or "weaken."

155. **The correct answer is (A).** A
     is a "cottage," a "hut," or a "cabin."

156. **The correct answer is (A).** To
     means to "detest," "abhor," or "hate" something or someone.

157. **The correct answer is (C).** To
       is to "condemn," "chide," or "blame."

158. **The correct answer is (A).** To be
       is to be "jubilant," "exhilarated," or "happy."

159. **The correct answer is (D).**
     means to be "curt," "blunt," or "abrupt."

160. **The correct answer is (D).** To
       something is to "squash," "flatten," or "push down."

161. **The correct answer is (A).** To
       is to "allay," "stifle," or "end."

162. **The correct answer is (D).** An
       is an "escapade," "journey," or "venture."

163. **The correct answer is (A).** To be
       means to be "dexterous," "expert," or "skillful."

164. **The correct answer is (B).** A
       is an "account," a "history," or a "record" of something.

165. **The correct answer is (D).** To be an
       person means to be "likeable."

166. **The correct answer is (A).** The
     meaning of the word   is to be "keen," "shrewd," or "clever."

167. **The correct answer is (A).** To
     something means to "divide," "split," or "cut" the object.

168. **The correct answer is (D).**
     means to be "distinguished," "important," or "outstanding."

169. **The correct answer is (A).** To
       is to "end," "cancel," or "stop" something.

170. **The correct answer is (C).** To
       means to "obstruct," "interfere," or "impede" something.

171. **The correct answer is (A).** To be in
       means to be in "strife," "discord," or "debate."

172. **The correct answer is (B).** To
       means to "admit," "allow," or "acknowledge."

173. **The correct answer is (D).** To
     means to "concede," "give up," or "relinquish."

174. **The correct answer is (C).** For
     something to be   means to be "clever."

Mathematics

CONCEPTS

175. **C**	180. **C**	185. **D**	190. **D**	195. **A**
176. **C**	181. **D**	186. **C**	191. **B**	196. **A**
177. **A**	182. **B**	187. **D**	192. **C**	197. **A**
178. **D**	183. **C**	188. **D**	193. **D**	198. **B**
179. **B**	184. **D**	189. **A**	194. **D**	

175. **The correct answer is (C).** A quadrilateral is defined as a figure with four sides. A triangle has only three sides.

176. **The correct answer is (C).** The symbol $\cap$ stands for "intersection." The intersection of two or more sets is the set of elements common to both sets. In this case, the common elements are 3 and 8.

177. **The correct answer is (A).** This problem requires you to "round off" the given number to the place one digit to the right of the decimal point.

178. **The correct answer is (D).** Always start with the operations in the parentheses first:

$(-2)^3 = (-2) \times (-2) \times (-2)$
$(-2)^3 = -8$

Then continue with the operations outside the parentheses:

$3 \times (-8) = -24$

Remember, a negative number times a positive number equals a negative number; a negative times a negative equals a positive.

179. **The correct answer is (B).** The digits 2 and 4 end in the hundredths place. This means $.24 = \dfrac{24}{100}$. When simplified to simplest form, $\dfrac{24}{100} = \dfrac{6}{25}$.

180. **The correct answer is (C).** A straight line represents a "straight angle" of 180°. An angle of 60° is given, so m∠C must be 120° to complete the line. Knowing that all the angles in a triangle added together equal 180°,

$m\angle A + m\angle B + m\angle C = 180°$
$m\angle A + 35° + 120° = 180°$
$m\angle A = 180° - 155°$
$m\angle A = 25°$

181. **The correct answer is (D).** When multiplying by 10, 100, 1,000, etc., move the decimal point one place to the right for each zero in the multiplier. In this example, 100 has two zeros, so the decimal point would be moved two places to the right.

182. **The correct answer is (B).** The reciprocal of a fraction is the fraction "reversed." To find the answer, you would have to rename $3\dfrac{1}{3}$ as an improper fraction: $3\dfrac{1}{3} = \dfrac{10}{3}$; $\dfrac{10}{3}$ is the reciprocal of $\dfrac{3}{10}$.

183. **The correct answer is (C).** The formula for finding the circumference of a circle is π times the diameter. The diameter is 2 times the radius. In this case, $2 \times 4 = 8$ is the diameter. Therefore,
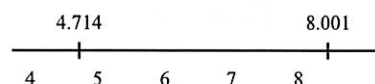
$= \pi$
$= 8\pi$

184. The correct answer is (D). The components of this problem must be stated in the same units. Therefore, 3 yards = 108 inches. The ratio of 108 to 18 is simplified to 6 to 1.

185. The correct answer is (D). State $\frac{33}{7}$ as a decimal number. $\frac{33}{7} = 4.714$

An integer is a whole number.

186. The correct answer is (C). The distributive property makes choice (C) true.

187. The correct answer is (D). $14^2 = 196$; $15^2 = 225$

188. The correct answer is (D). The base-five system uses only five symbols: 1, 2, 3, 4, and 0. Because of this, the other three alternatives are eliminated.

189. The correct answer is (A). When working with scientific notation, the exponent represents the number of places to move the decimal point in the multiplier. If the base of the exponent is 10, the decimal point moves to the right. If it is $\frac{1}{10}$, the decimal point moves to the left.

190. The correct answer is (D). This problem may be done without computation. The larger the denominator, the smaller the parts of the whole have been divided. The larger the numerator, the more parts are being considered. An alternative to this method is to find a common denominator and compare numerators. The largest numerator in this case shows the greatest value.

191. The correct answer is (B). The symbol means "greater than or equal to," and 6 is equal to 6.

192. The correct answer is (C). Figures are "similar" when their corresponding angles are equal and their corresponding sides are in proportion.

$$\frac{4}{3} = \frac{3}{5}$$
$$3 \quad = 20$$
$$= \frac{20}{3} = 6\frac{2}{3}$$

193. The correct answer is (D). By definition, an isosceles triangle is any triangle with two sides equal. Therefore, it is the only possible answer.

194. The correct answer is (D). For choice (D) to be equal, it would need the percent symbol after it.

195. The correct answer is (A). Prime factorization is factoring a number to the point where all factors are prime.

196. The correct answer is (A). The least common multiple is the least number divisible by both given numbers.

197. The correct answer is (A). This is done by ratios. The relationship between part of the lawn and the whole lawn is the same as the relationship between the time it takes to mow part of the lawn and the time it takes to mow the whole lawn.

198. The correct answer is (B). The associative property of addition means that you may group the numbers to be added in different ways and achieve the same sum.

PROBLEM-SOLVING

199. **C**	207. **A**	215. **B**	223. **A**	231. **C**
200. **B**	208. **C**	216. **C**	224. **C**	232. **C**
201. **D**	209. **A**	217. **A**	225. **D**	233. **A**
202. **D**	210. **A**	218. **B**	226. **A**	234. **A**
203. **A**	211. **C**	219. **C**	227. **A**	235. **B**
204. **B**	212. **C**	220. **A**	228. **D**	236. **C**
205. **A**	213. **A**	221. **C**	229. **B**	237. **B**
206. **D**	214. **D**	222. **D**	230. **C**	238. **D**

199. The correct answer is (C). This involves multiplication and addition.

Student
tickets $130 \times \$1.25 = \quad \$162.50$
Adult
tickets $340 \times \$1.90 = + \$646.00$
Total $= \quad \$808.50$

200. The correct answer is (B). When subtracting fractional numbers, you must first rename the numbers with a common denominator.

$$12 - 2\frac{3}{16} = \frac{192}{16} - \frac{35}{16}$$
$$= \frac{157}{16}$$
$$= 9\frac{13}{16}$$

201. The correct answer is (D). There are 12 months in 1 year. If $542.40 is the total amount paid in a year, the average amount paid per month is $542.40 ÷ 12 = $45.20.

202. The correct answer is (D). First, add $10 to Bob's $88:

$88 + $10 = $98

Then, divide by 4:

$98 ÷ 4 = $24.50

203. The correct answer is (A). When expressed without the parentheses, this equation is $6 - 12 + 7 - 3$. Solve by completing one part at a time:

$$6 - 12 + 7 - 3 = -6 + 7 - 3$$
$$= 1 - 3$$
$$= -2$$

204. The correct answer is (B). Replace the ▢ in the formula with 85 and solve:

$$= \frac{9}{5}(85) + 32 = 153 + 32$$
$$= 185$$

205. The correct answer is (A). This can be set up as an algebraic equation. If ▢ equals the price of the snowmobile, 5% of ▢ equals $42, or

$$.05 ▢ = \$42$$
$$▢ = \$42 ÷ .05$$
$$▢ = \$840$$

206. The correct answer is (D). Rename the number of the equation with a common denominator.

$$4\frac{1}{8} - 2\frac{2}{3} = \frac{33}{8} - \frac{8}{3}$$
$$= \frac{99}{24} - \frac{64}{24}$$
$$= \frac{35}{24}$$
$$= 1\frac{11}{24}$$

207. **The correct answer is (A).** Solve for

$$-5 + 4x = 21$$

$$4x = 21 + 5$$

$$4x = 26$$

$$x = \frac{26}{4}$$

$$x = 6.5$$

208. **The correct answer is (C).** Before multiplying, rename the mixed numbers as improper fractions:
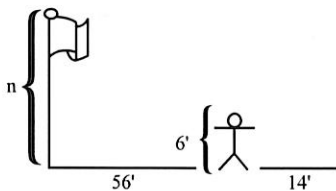
$$3\frac{1}{3} \times 3\frac{3}{4} \times \frac{2}{5} = \frac{10}{3} \times \frac{15}{4} \times \frac{2}{5}$$

$$= \frac{300}{60} = 5$$

209. **The correct answer is (A).** This can be set up as an algebraic equation. If is the amount Mr. Symon borrowed:

$$6\%(n) = 58.50$$

$$n = \frac{58.50}{6\%}$$

$$= \frac{58.50}{.06}$$

$$= 975$$

210. **The correct answer is (A).** This problem is done by ratios:

$$\frac{n}{6} = \frac{56}{14}$$

$$336 = 14n$$

$$\frac{336}{14} = n$$

$$24 = n$$

211. **The correct answer is (C).** By definition, the opposite sides of a rectangle are equal to each other. Because of this, if one side is 7 units, the opposite side is also 7 units. Consequently, 14 units account for two sides (7 + 7). The other two sides are each equal to (50 − 14) ÷ 2, or 18 units. Area is length times width—in this case:

7 × 18 = 126 square units

212. **The correct answer is (C).** Solve for :

$$4(3x - 2) = 16$$

$$12x - 8 = 16$$

$$12x = 24$$

$$x = \frac{24}{12}$$

$$x = 2$$

213. **The correct answer is (A).** Solve this as an algebraic equation with as the unknown integer:

$$n + 18 = \frac{5}{4}n$$

$$18 = \frac{5}{4}n - n$$

$$18 = \frac{1}{4}n$$

$$72 = n$$

214. **The correct answer is (D).** Replace the letters with the given numbers and solve:

$$7 - 3 =$$

$$7(6) - 3(3) =$$

$$42 - 9 = 33$$

215. **The correct answer is (B).** Because Jim is now 12, four years ago he was 8. His father was then 5 times older, or 40. Now, 4 years later, Jim's father is 44.

216. The correct answer is (C). Convert the mixed numbers into improper fractions, then find the common denominator and add:

$$2\frac{1}{2}+7\frac{2}{3}+\frac{3}{4}=\frac{5}{2}+\frac{23}{3}+\frac{3}{4}$$
$$=\frac{30}{12}+\frac{92}{12}+\frac{9}{12}$$
$$=\frac{131}{12}$$
$$=10\frac{11}{12}$$

217. The correct answer is (A).

$$N\%\times60=24$$
$$N\%=\frac{24}{60}$$
$$N\%=\frac{2}{5}$$
$$N\%=.4$$
$$N=40$$

218. The correct answer is (B). Solve for

$$10x-3=2x+4$$
$$10x-2x=4+3$$
$$8x=7$$
$$x=\frac{7}{8}$$

219. The correct answer is (C). To determine ratios, multiply the first numerator by the second denominator and the first denominator by the second numerator. Then reduce:

$$\frac{3}{4}\ \text{to}\ \frac{5}{2}$$
6 to 20
3 to 10

220. The correct answer is (A). First convert the dimensions of the rug to yards. Multiply these to obtain the area. Multiply the area by $5 to determine the total cost.

A = 9 ft. × 15 ft.
   = 3 yd. × 5 yd. = 15 sq. yards
15 sq. yds. × $5 = $75

221. The correct answer is (C).

$$
\begin{array}{r}
.57 \\
6.41\overline{)3.6537} \\
3.205 \\
\hline
4487 \\
4487 \\
\hline
0
\end{array}
$$

222. The correct answer is (D).

$$=$$
$$= 18 \times 2 \times 5$$
$$= 180\ \text{cu. in.}$$

223. The correct answer is (A). Replace the letters in the problem with the given numbers.

$$\frac{3ABC}{2A}=\frac{3\times3\times2\times6}{2\times3}$$
$$=\frac{108}{6}$$
$$=18$$

224. The correct answer is (C). Convert the mixed numbers into improper fractions. Then divide.

$$\frac{5\frac{2}{3}}{2\frac{5}{6}}=\frac{\frac{17}{3}}{\frac{17}{6}}$$
$$=\frac{17}{3}\div\frac{17}{6}$$
$$=\frac{17}{3}\times\frac{6}{17}=\frac{6}{3}=2$$

225. The correct answer is (D).

$$\frac{5}{6}x = 30$$

$$x = \frac{30}{1} \cdot \frac{6}{5}$$

$$x = \frac{180}{5}$$

$$x = 36$$

226. The correct answer is (A). When solving this problem, remember that the number of decimal places to the right of the decimal point in the answer should equal the total number of places to the right of the decimal points in the two factors being multiplied.

$$
\begin{array}{r}
65.14 \\
\times\ .013 \\
\hline
19542 \\
586260 \\
\hline
6.05802
\end{array}
$$

227. The correct answer is (A). The pattern in this set is made by adding .06 to each number.

228. The correct answer is (D).

$$
\begin{array}{r}
72528 \\
\times\ 109 \\
\hline
652\ 752 \\
000\ 00 \\
7\ 252\ 8 \\
\hline
7,905,552
\end{array}
$$

229. The correct answer is (B). Set this problem up as an algebraic equation.

$$11 \times 12 = \ \ + 3$$
$$132 = \ \ + 3$$
$$132 - 3 =$$
$$129 =$$

230. The correct answer is (C). Convert the mixed numbers into improper fractions. Then, divide the total length of the board by the length into which it will be cut.

$$9\frac{1}{2} \div 1\frac{1}{3} = \frac{19}{2} \div \frac{4}{3}$$
$$= \frac{19}{2} \times \frac{3}{4}$$
$$= \frac{57}{8}$$
$$= 7\frac{1}{8}$$

Though $\frac{1}{8}$ of a board is left, only 7 full-size boards can be made.

231. The correct answer is (C).

$$3\ \ + 3 < 9 +$$
$$3\ \ - \ \ < 9 - 3$$
$$2\ \ < 6$$
$$< \frac{6}{2}$$
$$< 3$$

232. The correct answer is (C). When adding decimal numbers, line up the decimal points.

$$
\begin{array}{r}
.602 \\
4.2 \\
+\ 5.03 \\
\hline
9.832
\end{array}
$$

233. The correct answer is (A).

$$2.5x + 12.5 = 30$$
$$2.5x = 30 - 12.5$$
$$2.5x = 17.5$$
$$x = \frac{17.5}{2.5}$$
$$x = 7$$

234. The correct answer is (A).

$$
\begin{array}{r}
1960 \\
28\overline{)54900} \\
28 \\
\hline
269 \\
252 \\
\hline
170 \\
168 \\
\hline
20
\end{array}
$$

235. The correct answer is (B).

$$\sqrt{x+36}=10$$
$$x+36=10^2$$
$$x+36=100$$
$$x=100-36$$
$$x=64$$

236. The correct answer is (C).

$$
\begin{array}{r}
143_{(5)} \\
+\ \ 33_{(5)} \\
\hline
231_{(5)}
\end{array}
$$

237. The correct answer is (B). Rename the fractions with a common denominator. Do the operations in parentheses first.

$$\left(\frac{2}{3}+\frac{1}{5}\right)-\left(\frac{1}{4}+\frac{1}{2}\right)=x$$
$$\left(\frac{10}{15}+\frac{3}{15}\right)-\left(\frac{1}{4}+\frac{2}{4}\right)=x$$
$$\frac{13}{15}-\frac{3}{4}=x$$
$$\frac{52}{60}-\frac{45}{60}=\frac{7}{60}$$

238. The correct answer is (D). First determine how many times 25,000 can be divided by 100: $25{,}000 \div 100 = 250$

For $100 in 25,000, $3.62 must be paid in taxes: $250 \times 3.62 = \$905.00$

Language

239. **C**	251. **D**	263. **D**	275. **C**	287. **D**
240. **B**	252. **A**	264. **B**	276. **B**	288. **A**
241. **B**	253. **A**	265. **B**	277. **A**	289. **A**
242. **C**	254. **A**	266. **C**	278. **C**	290. **A**
243. **B**	255. **D**	267. **C**	279. **B**	291. **B**
244. **D**	256. **A**	268. **A**	280. **B**	292. **D**
245. **D**	257. **C**	269. **A**	281. **A**	293. **B**
246. **C**	258. **A**	270. **C**	282. **C**	294. **C**
247. **C**	259. **B**	271. **D**	283. **D**	295. **A**
248. **D**	260. **C**	272. **C**	284. **B**	296. **B**
249. **B**	261. **D**	273. **D**	285. **B**	297. **D**
250. **D**	262. **D**	274. **B**	286. **A**	298. **B**

239. The correct answer is (C). should be capitalized.

240. The correct answer is (B). There should be a comma after

241. The correct answer is (B). and should both be capitalized.

242. The correct answer is (C). There should be a comma after , not a colon.

243. The correct answer is (B). refers to ability; is used to request permission.

244. The correct answer is (D). No mistakes.

245. The correct answer is (D). No mistakes.

246. The correct answer is (C). The word   is incorrect in this context. The word should be   (they are).

247. The correct answer is (C). The word   (who is) is incorrect in this context. The word should be   .

248. The correct answer is (D). No mistakes.

249. The correct answer is (B). There should be quotation marks before   because it is a continuation of a direct quote.

250. The correct answer is (D). No mistakes.

251. The correct answer is (D). No mistakes.

252. The correct answer is (A). Because the action is from the teacher toward another place, the correct word is   .

253. The correct answer is (A). The word   (you are) is incorrect in this context. The word should be   .

254. The correct answer is (A). The tense is incorrect. The last part of the sentence should read   .

255. The correct answer is (D). No mistakes.

256. The correct answer is (A). The object of the preposition   is Dierdre and   .

257. The correct answer is (C). The word   is incorrect in this context. The word should be   .

258. The correct answer is (A). The word   should be capitalized.

259. The correct answer is (B). The past tense of the verb   is   .

260. The correct answer is (C). The question mark should be placed before the final quotation marks.

261. The correct answer is (D). No mistakes.

262. The correct answer is (D). No mistakes.

263. The correct answer is (D). No mistakes.

264. The correct answer is (B). The word   is incorrect in this context. The word should be   .

265. The correct answer is (B). The word   is incorrect in this context. The word should be   .

266. The correct answer is (C). The preposition   is incorrect in this context. The word should be   , meaning excessive.

267. The correct answer is (C). The number of hours can be counted—therefore,   .

268. The correct answer is (A). The possessive of   is   .   is the contraction for   .

269. The correct answer is (A).   is singular. The pronoun must be singular as well. Either   or   would be correct.

270. The correct answer is (C). There are three, so the comparative term must be   .

271. The correct answer is (D). No mistakes.

272. The correct answer is (C). The subjective   is incorrect in this context. The correct word is   , the object of the verb   .

273. The correct answer is (D). No mistakes.

274. The correct answer is (B). I feel   . I would feel   if something were wrong with my hands.

275. The correct answer is (C). The subject/verb of the sentence is   .

276. The correct answer is (B). I   wait. The double negative is incorrect.

277. **The correct answer is (A).** The apostrophe in   should be placed before the   since   is a plural word.

278. **The correct answer is (C).** The word   is incorrect in this context. The correct word is   . The double negative is unacceptable.

279. **The correct answer is (B).** The correct spelling is

280. **The correct answer is (B).** The correct spelling is

281. **The correct answer is (A).** The correct spelling is   (see Spelling—Rule 9, page 125).

282. **The correct answer is (C).** The correct spelling is

283. **The correct answer is (D).** No mistakes.

284. **The correct answer is (B).** The correct spelling is

285. **The correct answer is (B).** The correct spelling is

286. **The correct answer is (A).** The correct spelling is

287. **The correct answer is (D).** No mistakes.

288. **The correct answer is (A).** The correct spelling is

289. **The correct answer is (A).**   indicates the cause-and-effect relationship of the two clauses.

290. **The correct answer is (A).** The second clause provides an example.

291. **The correct answer is (B).** The subject (   ) must follow the introductory phrase.

292. **The correct answer is (D).** No mistakes.

293. **The correct answer is (B).** The second clause offers the reason why she drove 50 miles.

294. **The correct answer is (C).** The invention of the automobile definitely belongs in a discussion of the history of the automobile.

295. **The correct answer is (A).** The clause   modifies

296. **The correct answer is (B).** Sentences 1, 3, and 4 all concern preparation for the Halloween party.

297. **The correct answer is (D).** All of these topics are too broad for a one-paragraph theme.

298. **The correct answer is (B).** The given sentence should fall before sentence 3, because it refers to a singular noun and sentence 2 contains a plural noun. By placing the sentence between 2 and 3, the paragraph makes sense.

answers practice test 5