HSPT Preparation Program: Complimentary Assessment Exam

To sign-up for your RedwoodPrep HSPT preparation program, please visit us at:
www.RedwoodPrep.com

If we do not offer a course in your area, we now offer an online HSPT course. To register, visit our site, press the “Sign-up” button, select “HSPT” for the program and “CA – ONLINE” for the area. After you register, you will receive an email with information on how to access the course as well as a preparation manual in the mail.
Thank you for downloading RedwoodPrep’s complimentary HSPT Assessment Exam!

The following exam is closely modeled on the actual HSPT exam and should provide good practice and significant insight into the sections and questions your son or daughter should work on most. The provided answer explanations will also help begin the process of improvement leading up to the actual exam.

In addition to this free practice exam, RedwoodPrep offers a highly-popular and effective preparation program for the High School Placement Exam (or HSPT). Please visit us online at www.RedwoodPrep.com to sign-up for this course and read the next page for more information on what our course offers.

We wish you all the best with your high school admission’s process and HSPT exam,

John Nantz
RedwoodPrep Director
john.a.nantz@RedwoodPrep.com
415.987.9425

Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
RedwoodPrep’s HSPT Program – Brief Overview

General Course Outline:

Redwood’s HSPT course runs for four days and is taught by some of the best local high school instructors from your area. Visit our site and click on the ‘Find Your Instructor’ tab to learn more about your instructors.

On Day 1, students take an assessment exam modeled on the HSPT to highlight particular areas the student needs to work on. Over the next three days, our instructors review all 5 sections of the exam - Verbal Skills, Mathematics, Reading, Language, and Quantitative Skills. Each section is broken down into three to five question types, and the students are taught the content and problem-solving skills necessary to solve each type of question. The classroom experience is high-energy, fast-paced and focused. Students receive daily homework assignments to help hone their problem solving skills and concept knowledge. Students are encouraged to take the provided full-length Practice Exam to get additional practice.

Key areas of emphasis include:

Time Management

Time management is crucial for the HSPT and all standardized exams. RedwoodPrep trains students to monitor, manage and use time effectively.

Problem-solving Strategies

Using a proven, structured system, RedwoodPrep teaches students how to effectively and efficiently answer every problem on the exam. For all the HSPT’s question types, RedwoodPrep offers a specific, structured strategy students can use to frame, breakdown and answer problems.

Guided, Intensive Content Learning

RedwoodPrep focuses students to deepen and strengthen their content knowledge during the four day class. In-class problems and quizzes along with daily homework assignments help drive student learning. The process helps prepare students for the exam and burnishes the skills and concepts they have learned during their academic career thus far.

Practice Exams and Question Banks

RedwoodPrep provides large question banks for every question type on the HSPT. Two full-length practice exams and answer keys provide additional preparation. In total, the preparation packet includes over a thousand representative practice problems for students to work on.

Mental Preparation and Confidence Building

Low confidence, anxiety and a high-stress mentality can de-rail a prepared student. RedwoodPrep uses in-class exercises and awareness techniques to help build mental preparation and confident so students can put their best foot forward on test day.

Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
About the Authors & RedwoodPrep Founders

Greg Owsley

Greg chairs the Mathematics Department at Rockhurst High School, the Jesuit high school in Kansas City, Missouri. Greg earned a BS in Mathematics and a BA in Religious Studies from the University of Rochester, an MS in Education from the University of Missouri Kansas City and has taken a significant number of additional graduate Mathematics classes at the University of Missouri Kansas City. In addition to chairing Rockhurst’s math department and running RedwoodPrep, Greg leads Rockhurst’s mathematics team, chess team and juggling team. In his spare time, Greg continues to improve his juggling skills and performs in a variety of local Kansas City art shows and festivals. Greg enjoys international travel and counts his visits to South America, Europe and the Middle East as personal highlights.

John Nantz

John studied at Stanford University where he earned a BA in Economics, a minor in Mathematics and an MS in Management Science and Engineering. He graduated Phi Beta Kappa. John graduated from Rockhurst High School, the Jesuit high school in Kansas City, Missouri, in 2005. While at Rockhurst, John found a passion for helping others learn. John initially tutored individual students but ended up instructing classes for standardized exams – including the SAT, ACT and HSPT – and the college admissions process. After graduating from Stanford, John worked as a consultant at McKinsey & Company, a leading global consulting firm, in the company’s San Francisco office. He is now working full-time on a book. For fun, John enjoys long and sometimes challenging trips which have included a bike trip across America and three month trips in Europe and Asia.
Verbal Skills

8 Minutes

Directions: Mark one answer – the answer you think is best – for each problem.

1. Which word does not belong with the others?
   (A) driver.
   (B) chauffeur.
   (C) escort.
   (D) automobilist.

2. River B has more volume than River C. River A has more volume than River B. River C has more volume than River A. If the first two statements are true, the third is
   (A) true.
   (B) false.
   (C) uncertain.

3. Epoch most nearly means
   (A) announcement.
   (B) era.
   (C) declaration.
   (D) decision.

4. Which word does not belong with the others?
   (A) shiver.
   (B) tremble.
   (C) quiver.
   (D) flurry.

5. The buoyant raft is
   (A) floating.
   (B) handmade.
   (C) sturdy.
   (D) powerful.

6. Which word does not belong with the others?
   (A) trial.
   (B) disagreement.
   (C) hearing.
   (D) case.

7. Yellow is more common than red. Red is less common than blue but more common than brown. Yellow is more common than Brown. If the first two statements are true, the third is
   (A) true.
   (B) false.
   (C) uncertain.

8. Idiomatic means the opposite of
   (A) frank.
   (B) standardized.
   (C) individualized.
   (D) steady.

9. Rug is to floor as curtain is to
   (A) window.
   (B) building.
   (C) room.
   (D) secret.

10. Which word does not belong with the others?
    (A) office.
    (B) building.
    (C) house.
    (D) store.
11. Implication most nearly means
(A) action.
(B) word.
(C) suggestion.
(D) discussion.

12. Which word does not belong with the others?
(A) playground.
(B) see-saw.
(C) slide.
(D) swings.

13. Hunch is to instinct as knowledge is to
(A) whispers
(B) facts.
(C) debate.
(D) murmurs.

14. Bill scored more goals than Tom.
FrTom scored more than Jack but less than Weston. Jack scored more than Bill. If the first two statements are true, the third is
(A) true.
(B) false.
(C) uncertain.

15. Film is to documentary as writing is to
(A) literary.
(B) journalistic.
(C) lively.
(D) proper.

16. Which word does not belong with the others?
(A) glove.
(B) mitten.
(C) ring.
(D) mitt.

17. Deliberate most nearly means
(A) loud.
(B) repeated.
(C) controversial.
(D) intentional.

18. Disclosing most nearly means
(A) exploring.
(B) hiding.
(C) revealing.
(D) deciding.

19. Vigorous means the opposite of
(A) quiet.
(B) bored.
(C) pale.
(D) lifeless.

20. Validation most nearly means
(A) debating.
(B) confirmation.
(C) showcasing.
(D) demonstration.

21. Which word does not belong?
(A) tiger.
(B) lion.
(C) cheetah.
(D) tabby.

22. The benevolent king is
(A) wise.
(B) old.
(C) kind.
(D) optimistic.

23. Which word does not belong with the others?
(A) debunked.
(B) dejected.
(C) downhearted.
(D) disconsolate.

24. Asleep is the opposite of
(A) dancing.
(B) fishing.
(C) awake.
(D) lost.

25. Vigilant means the opposite of
(A) raw.
(B) oblivious.
(C) unaffected.
(D) dignified.
26. Recycle is to newspaper as compost is to
(A) pile.
(B) food.
(C) garden.
(D) environment.

27. Which word does not belong with the others?
(A) jewelry.
(B) ring.
(C) necklace.
(D) earring.

28. Sedan is to car as dinghy is to
(A) airplane.
(B) train.
(C) boat.
(D) sailor.

29. Mr. Nantz and Mr. Owsley teach better than Bill. Bill teaches better than Mr. Samuelson. Mr. Owsley teaches better than Mr. Samuelson. If the first two statements are true, the third is
(A) true.
(B) false.
(C) uncertain.

30. Squalor means the opposite of
(A) scoundrel.
(B) quietude.
(C) cleanliness.
(D) poverty.

Wait For Instructions Before Moving onto the Next Section
Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an **online HSPT course**. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
Quantitative Skills

15 Minutes

Directions: Mark one answer – the answer you think is best – for each problem.

31. Look at this series: 16, 21, 31, 36, ….What number should come next?
   (A) 41  
   (B) 46  
   (C) 45  
   (D) 44

32. The square of what number is 36 divided by 4?
   (A) 3  
   (B) 1  
   (C) 9  
   (D) 6

33. Which of the following have shading that is symmetrical?
   
   
   (A) I only  
   (B) II only  
   (C) I and II  
   (D) II and III

34. Look at this series: 46, 39, 32, ___, 18, 11, 4, …What number should fill the blank in the middle of the series?
   (A) 25  
   (B) 24  
   (C) 21  
   (D) 23

35. Examine (I), (II), and (III) and find the best answer.
   (I) 15% of 100  
   (II) 20% of 75  
   (III) 500% of 3
   (A) (III) is greater than (I) and (II)  
   (B) (III) is less than (I) and (II)  
   (C) (III) is equal to (I) but less than (II)  
   (D) (I), (II), and (III) are all equal

36. Look at this series: 34, 32, 35, 33, 36, what three numbers should come next?
   (A) 31, 34, 32,  
   (B) 34, 36, 40  
   (C) 34, 37, 35  
   (D) 39, 37, 40

37. What number is 3 less than \( \frac{1}{3} \) of 18?
   (A) 6  
   (B) 3  
   (C) 2  
   (D) 9
38. Examine (I), (II), and (III) and find the best answer.
(I) \( \frac{7 \times 6}{3} \)
(II) \( 7 \times 3 - 7 \)
(III) \( 4 \times 2 + 8 \)
(A) (III) is greater than (I) and (II)
(B) (III) is less than (I) and (II)
(C) (III) is equal to (I) but less than (II)
(D) (I), (II), and (III) are all equal

39. If \( AB = 13 \) and \( AC = 5 \), then \( BC = ? \)

(A) 8
(B) 12
(C) 144
(D) 25

40. Look at this series: 111, 107, ____, 95, 87, 83. What number should fill in the blank in the middle of the series?
(A) 100
(B) 99
(C) 98
(D) 97

41. \( \frac{5}{2} \) of what number is 35 divided by 7?
(A) 2
(B) 10
(C) 1
(D) 15

42. Look at this series: 52, 51, 48, 43, 36, 27,… What number should come next?
(A) 17
(B) 15
(C) 16
(D) 11

43. Examine (I), (II) and (III) and find the best answer.
(I) \( 0.7 \)
(II) \( 7\% \)
(III) \( \frac{1}{7} \)
(A) (I) is greater than (III), which is greater than (II).
(B) (I) is equal to (III) and greater than (II).
(C) (I) is equal to (II) and greater than (III)
(D) (I) is less than (II) and equal to (III).

44. Six times three is \( \frac{2}{3} \) of what number?
(A) 27
(B) 18
(C) 12
(D) 36

45. Look at this series: 3, 10, 17, 24, 31, 38,… What number should come next?
(A) 41
(B) 47
(C) 45
(D) 43
46. Examine the right triangle below and find the best answer.

(A) \( \angle A + \angle B = \angle C \)
(B) \( \angle A + \angle B > \angle C \)
(C) \( \angle A + \angle B < \angle C \)
(D) \( \angle A > \angle C \)

47. Look at this series: 200, 199, 189, 188, 178,…What two numbers should come next?
(A) 168, 167
(B) 177, 167
(C) 176, 168
(D) 175, 165

48. What number divided by 3 leaves 7 more than 2?
(A) 3
(B) 27
(C) 15
(D) 5

49. Examine (I), (II) and (III) and find the best answer if both \( x \) and \( y \) are greater than zero.

(I) \( 4(x + y) \)
(II) \( 4x + 4y \)
(III) \( 4(x + y) + x \)

(A) (I), (II) and (III) are equal
(B) (II) is equal to (I), which is less than (III).
(C) (III) is greater than (I) and less than (II).
(D) (I) and (III) are equal.

50. Look at this series: E22, I26, M30, Q34…What comes next?
(A) U38
(B) T37
(C) S36
(D) V40

51. What number is 3 less than \( \frac{3}{2} \) of 4?
(A) 12
(B) 9
(C) 6
(D) 3

52. Look at this series: 12, 9, 5, 7, 4, 5,…What number should come next?
(A) 1.5
(B) 1
(C) 2
(D) 3

53. Look at this series: 4, 8, 16, 32…What number should come next?
(A) 62
(B) 64
(C) 34
(D) 36

54. What number is 12 more than \( \frac{3}{7} \) of 35?
(A) 15
(B) 17
(C) 27
(D) 3

55. What number is 9 less than 6 squared?
(A) 25
(B) 27
(C) 36
(D) 45
56. Look at this series: 35, 40, 50, 55, 65, … What three numbers should come next?
(A) 75, 80, 90
(B) 70, 75, 85
(C) 70, 80, 85
(D) 75, 85, 80

57. Examine the rectangle below and find the best answer.

(A) $\overline{AB} > \overline{BC}$
(B) $\overline{AB} = \overline{BD}$
(C) $\overline{BC} = \overline{BD}$
(D) $\overline{BD} > \overline{AD}$

Wait For Instructions Before Moving onto the Next Section
Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
The Treaty of Tordesillas was an accord between the crowns of Spain and Portugal that divided all land to be discovered outside of Europe along a line of longitude 370 leagues west of the Cape Verde islands off the west coast of Africa. That land to the east—including modern-day Africa, China, and India—would belong to Portugal. That land to the west would belong to Spain. The treaty takes its name from the Spanish city of Tordesillas, and it was signed on June 7, 1949.

The treaty was intended to resolve the dispute between Spain and Portugal ignited by Christopher Columbus’ return from the New World. On May 4, 1493 Pope Alexander VI had first attempted to address the issue when he declared that all land to be discovered west of a meridian 100 leagues west of the Azores Islands or the Cape Verde Islands would belong to Spain.

The Portuguese King, John II, protested that the treaty gave him far too little land; it precluded his goal of possessing India. Rather than looking to the Pope to settle the matter satisfactorily, John II attempted to negotiate directly with King Ferdinand and Queen Isabella of Spain to move the line to the west—a move that would allow Portugal to claim land discovered east of the line.

These negotiations resulted in the Treaty of Tordesillas, effectively obviating the proclamation of Alexander VI. Pope Julius II approved the new treaty on January 24, 1506.

Despite all the contention manifested in the negotiation of a mutually acceptable accord, the meridian established in the Treaty of Tordesillas was never strictly enforced. The Spanish crown did not resist the Portuguese expansion of Brazil across the meridian. The treaty was also rendered meaningless between 1580 and 1640 because the Spanish King was also the King of Portugal.

58. According to this passage, the Treaty of Tordesillas most directly
(A) divided the world between Spain and Portugal.
(B) prevented Spain and Portugal from going to war.
(C) allowed Portugal to build a stronger navy.
(D) helped Spain save a lot of money.

59. The Treaty was
(A) highly effective at restoring peace between Spain and Portugal.
(B) a source of two wars between Spain and Portugal.
(C) not strictly enforced.
(D) always enforced and still important today.

60. In preparing to write the Treaty, King John II
(A) talked to the Pope.
(B) talked with his counsel.
(C) consulted no one.
(D) talked with the Spanish monarchs.
61. The Treaty of Tordesillas dealt with Spain and Portugal's right to colonize
(A) newly discovered land outside of Europe.
(B) islands in the Atlantic ocean.
(C) the rest of Europe.
(D) southeast Asia.

62. According to the terms of the Treaty, Spain had the right to colonize all land west of the Cape Verde Islands; Portugal had the right to colonize
(A) South America
(B) North America
(C) Central America
(D) modern-day Africa, India and China

63. The Treaty of Tordesillas was meaningless for sixty years because
(A) the Portuguese king decided not to build any more colonies.
(B) Spain and Portugal were ruled by the same king.
(C) all the land in question had already been colonized.
(D) Spain and Portugal were at war.

64. The title that best expresses the main idea of this selection is
(A) "Spain and Portugal in the late 15th Century."
(B) "Spanish and Portuguese Colonies."
(C) "The History of the Treaty of Tordesillas."
(D) "Why the Treaty of Tordesillas Was Useless."

65. Originally, the Treaty was made so that the Portuguese king could colonize
(A) India.
(B) The Cape Verde islands.
(C) The Azores islands.
(D) East Africa.

66. The Treaty was approved by
(A) several European monarchies.
(B) the citizens of both countries.
(C) the citizens of the colonized countries.
(D) the sitting pope.

67. This passage illustrates that at the end of the 15th century, Spain and Portugal's top priority was:
(A) a strong alliance with the Church.
(B) a strong alliance with each other.
(C) building colonies around the world.
(D) promoting world peace.
I fish because I love to. Because I love the environs where trout are found, which are invariably beautiful. And I hate the environs where crowds of people are found, which are invariably ugly. Because of all the television commercials, cocktail parties, business meetings, and other assorted social posturing I have to do six days of the week.

Because most men spend their lives doing what they hate, fishing is at once an endless source of delight and an act of small rebellion. I only have one life, and I don't want to waste it.

Trout do not lie or cheat and cannot be bought or bribed or impressed by power. They respond only to quietude and humility and endless patience. Mercifully, there are no telephones on trout waters. Only in these woods can I find solitude without loneliness.

I do not regard fishing as terribly important. But I suspect that so many of the other concerns of men are equally unimportant — and not nearly so much fun.

~adapted from an essay by John Voelker

68. The author of this passage would probably be most pleased if
(A) He had more time to fish.
(B) More people became fisherman.
(C) More people were rebellious.
(D) He went to fewer cocktail parties.

69. In this passage, the author implies that many people are
(A) equally interested in nature.
(B) inherently evil.
(C) too concerned with superficial things, like social status.
(D) more intelligent than he.

70. The author thinks that fishing is:
(A) not important.
(B) what makes him the man he is.
(C) fun and enjoyable.
(D) a trivial hobby that embarrasses him.

71. If he were not fishing, the author of this passage would probably most enjoy:
(A) being in a big crowd of people.
(B) hiking in the woods.
(C) reading a book.
(D) going to a football game.

72. The title that best expresses the main idea of this selection is:
(A) "A Hobby You Should Try."
(B) "All About Fishing."
(C) "Unimportant Things Can Be Fun."
(D) "Why I Fish."

73. The author gives several examples of "social posturing." Which one does he NOT mention?
(A) filming commercials.
(B) having business meetings.
(C) attending cocktail parties.
(D) hosting dinner parties.

74. Fishing helps the author of this passage be
(A) humble.
(B) connected to his family.
(C) aware of his anger.
(D) religious.

75. This author shows that he is against
(A) trying to impress other people.
(B) materialism.
(C) organized religion.
(D) hard work.

76. Why does the author describe fishing as "an act of small rebellion?"
(A) because trout are endangered and should not be fished.
(B) because trout fishing is not fashionable.
(C) because trout fishing takes him away from social obligations he doesn't enjoy.
(D) because trout fishing is dangerous.
77. Why is the author most glad that there are no telephones on trout waters?
(A) because he enjoys communicating.
(B) because he enjoys tranquility.
(C) because telephones would destroy the trout's habitat.
(D) phones are visually unappealing.

**Vocabulary**

Choose the word that means the same or about the same as the underlined word.

<table>
<thead>
<tr>
<th>78. the brink of war</th>
<th>84. indigenous plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) idea</td>
<td>(A) popular</td>
</tr>
<tr>
<td>(B) verge</td>
<td>(B) native</td>
</tr>
<tr>
<td>(C) middle</td>
<td>(C) vanished</td>
</tr>
<tr>
<td>(D) consequences</td>
<td>(D) innocent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>79. political turmoil</th>
<th>85. restrictive laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) election</td>
<td>(A) rejecting</td>
</tr>
<tr>
<td>(B) argument</td>
<td>(B) destroying</td>
</tr>
<tr>
<td>(C) conflict</td>
<td>(C) sharing</td>
</tr>
<tr>
<td>(D) war</td>
<td>(D) limiting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>80. defiant action</th>
<th>86. the emblem of American culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) determined</td>
<td>(A) symbol</td>
</tr>
<tr>
<td>(B) rebellious</td>
<td>(B) pride</td>
</tr>
<tr>
<td>(C) spirited</td>
<td>(C) unity</td>
</tr>
<tr>
<td>(D) unified</td>
<td>(D) deity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>81. an abolished law</th>
<th>87. accurate depictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) eliminated</td>
<td>(A) discussions</td>
</tr>
<tr>
<td>(B) expanded</td>
<td>(B) celebrations</td>
</tr>
<tr>
<td>(C) argued</td>
<td>(C) attacks</td>
</tr>
<tr>
<td>(D) contested</td>
<td>(D) representations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>82. an official proclamation</th>
<th>88. to commemorate the event</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) appropriation</td>
<td>(A) degrade</td>
</tr>
<tr>
<td>(B) severance</td>
<td>(B) mark</td>
</tr>
<tr>
<td>(C) engagement</td>
<td>(C) remember</td>
</tr>
<tr>
<td>(D) declaration</td>
<td>(D) neglect</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>83. distinct clothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) copied</td>
</tr>
<tr>
<td>(B) influential</td>
</tr>
<tr>
<td>(C) noticeable</td>
</tr>
<tr>
<td>(D) endearing</td>
</tr>
</tbody>
</table>

Wait For Instructions Before Moving onto the Next Section
Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
Mathematics

23 Minutes

Directions: Mark one answer – the answer you think is best – for each problem. You may use scratch paper when working these problems.

Concepts

89. Which number is in the hundredths place of the following number: 123.456
   (A) 1
   (B) 2
   (C) 5
   (D) 6

90. Simplify: \(5(-2)^4\)
   (A) -80
   (B) 80
   (C) 40
   (D) -40

91. To divide a number by 100, move the decimal point
   (A) two places to the right
   (B) two places to the left
   (C) one place to the right
   (D) one place to the left

92. Which of the following is a pair of reciprocals?
   (A) 4 and -4
   (B) 8 and .25
   (C) 4 and \(\frac{1}{4}\)
   (D) 4 and \(-\frac{1}{4}\)

93. The ratio of 2 yards to 12 inches is
   (A) 6 to 1
   (B) 72 to 1
   (C) 5 to 1
   (D) 1 to 6

94. The square root of 150 is between
   (A) 10 and 11
   (B) 11 and 12
   (C) 12 and 13
   (D) 13 and 14

95. Which of the following is true?
   (A) \(\frac{1}{3} < \frac{1}{4}\)
   (B) \(\frac{1}{3} < \frac{1}{2}\)
   (C) \(\frac{1}{2} < \frac{2}{3}\)
   (D) \(\frac{1}{3} > \frac{4}{9}\)

96. Which of the following represents an irrational number?
   (A) 0
   (B) \(\frac{1}{3}\)
   (C) .\overline{8}
   (D) \(\pi\)
97. $\triangle ABC$ is similar to $\triangle DBE$. The length of $AD$ is

(A) 9
(B) 5
(C) 4
(D) 13

98. As a fraction, 0.36 is written in simplest form as

(A) $\frac{36}{100}$
(B) $\frac{18}{50}$
(C) $\frac{3}{5}$
(D) $\frac{9}{25}$

99. The least common multiple 4 and 6 is

(A) 12
(B) 3
(C) 4
(D) 24

100. If Ray can clean a room in 4 hours and Phil can clean the same room in 6 hours, how long will it take them to clean the room together?

(A) 2 hours
(B) 2 hours and 24 minutes
(C) 2 hours and 40 minutes
(D) 5 hours

101. Solve: $2 \frac{1}{7} - \frac{4}{5} =$

(A) $2 \frac{7}{35}$
(B) $1 \frac{7}{35}$
(C) $1 \frac{2}{35}$
(D) $1 \frac{12}{35}$

102. Emily has $24 less than three times the amount Diane has. If Emily has $27, how much money does Diane have?

(A) $28$
(B) $18$
(C) $1$
(D) $17$

103. The formula $F = \frac{9}{5}C + 32$ converts temperature from Centigrade to Fahrenheit. What is the Centigrade temperature for 86º Fahrenheit?

(A) 30 º
(B) 46 º
(C) 27 º
(D) 54 º

104. If $3x - 24 = x + 6$, $x =$

(A) 15
(B) 20
(C) 6
(D) 10

105. If Jeff and his date Ashley each buy a slice of pizza for $3.90 and there is a 7% sales tax, how much change will Jeff receive if he pays with a $10 bill?

(A) $2.28$
(B) $1.65$
(C) $5.84$
(D) $0.67$

Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
106. If Greg is 6 feet tall and has a shadow that is 8 feet long, how tall is Frank if his shadow is 40 inches long?
(A) 2 feet
(B) 2 feet and 12 inches
(C) 2 feet and 6 inches
(D) 2 feet and 5 inches

107. Solve for x: \(3(5x-4) = 18\)
(A) \(\frac{7}{15}\)
(B) \(\frac{2}{5}\)
(C) 2
(D) \(\frac{7}{5}\)

108. If \(A = 2\) and \(B = -3\), then \(A-AB =\)
(A) -4
(B) 8
(C) 0
(D) 4

109. Solve: \(\frac{1}{5} + \frac{1}{3} + \frac{1}{15} =\)
(A) \(6\frac{1}{5}\)
(B) \(6\frac{3}{5}\)
(C) \(6\frac{4}{5}\)
(D) \(6\frac{7}{15}\)

110. If \(3x-4 = \frac{1}{3}\), then \(x=\)
(A) \(\frac{4}{9}\)
(B) \(\frac{4}{9}\)
(C) \(\frac{1}{9}\)
(D) \(\frac{5}{9}\)

111. If it costs $2.50 per square foot to paint a wall, how much will it cost to paint two walls if the walls are 12’ by 20’?
(A) $1200
(B) $600
(C) $110
(D) $1,000,000

112. The area of the following circle is

113. \(\frac{7}{9}x = 56\)

114. Solve: \(-0.02 \times 6.78\)

115. Solve: \(45.652 \times 1007\)

Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
116. If $x - 5 < 11$, $x$ is
(A) less than 6
(B) less than 16
(C) greater than 6
(D) greater than 16

117. Solve: $0.231 + 1.03 + 3.2 = \underline{}$
(A) 4.461
(B) 4.251
(C) 4.431
(D) 4.434

118. Solve: $7.32 \div 5.1$
(A) 2.28
(B) 218
(C) 22.8
(D) 21.8

119. If each school bus carries 48 passengers, how many busses are necessary to transport 1,000 students?
(A) 48,000 busses
(B) 20 busses
(C) 21 busses
(D) $20 \frac{5}{12}$ busses

120. When buying a car, the tax rate is $5.18 for each $100 spent. How much tax will be paid on a car assessed at $21,000?
(A) $877.80
(B) $1,087.80
(C) $1,878.00
(D) $1,036.00

Wait For Instructions Before Moving onto the Next Section

Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
Language

13 Minutes

Directions: In questions 121-150, look for errors in capitalization, punctuation, or usage. If you find no mistake, mark (D) on your answer sheet.

121. (A) Mrs. Ford asked me to drive her to O’Hare Chicago International Airport. 
(B) “I would like to understand the various components of the project better,” the teacher told us, “But it is a very promising idea.” 
(C) We really enjoyed the dinner party at your house last week, but it’s too bad we arrived late. 
(D) No mistake.

122. (A) There is a lot of dew on the lawn this morning; make sure you wear shoes to go get the paper. 
(B) George, Fred, Tom and I walked all the way across town before I realized that I’d forgotten my wallet. 
(C) I learned a lot from all the tremendously good teachers I had. 
(D) No mistakes.

123. (A) However, it doesn’t seem like it will be a major problem—at least, that’s what Mr. Thompson says. 
(B) Many birds fly South for the winter, but the birds in this park are not migratory. 
(C) The streets in this City are poor. 
(D) No mistake.

124. (A) There is such a thing. 
(B) Every night, I lay down in my bed and think about everything that happened during the day. 
(C) I hope that the owner of this purse figures out where she left it; I certainly don’t know whose it is. 
(D) No mistakes.

125. (A) George asked, "Do you really think that our teacher will allow us to retake the test?"
(B) My extended family lives far away, but we always enjoy each others' company when they visit. 
(C) After I read Midnight in the Garden of Good and Evil, I really wanted to visit Savannah. 
(D) No mistake.

126. (A) We are packed and all ready to leave. 
(B) Two different people today asked me to help them with their final essays. 
(C) The homework was due yesterday, like you should already know. 
(D) No mistakes.

127. (A) He gave an award to both Carlos and I. 
(B) The cat licked its paw and rolled over on the sofa. 
(C) You’re positive that you turned off your stove? 
(D) No mistakes.

128. (A) I saw alot of monkeys at the zoo. 
(B) Be sure to talk loudly. 
(C) We’re not supposed to touch the exhibits. 
(D) No mistake.

129. (A) Can you spare some time? 
(B) Those are Frank’s glasses over there. 
(C) The teacher gave Kim a failing, grade. 
(D) No mistakes.
130. 
(A) Many people dislike going to the dentist. 
(B) The window shattered to dozens of pieces. 
(C) Beyond those trees is the farm. 
(D) No mistake.

131. 
(A) Every Wednesday this coming February, my brother's band will play a free concert in the park a few blocks from our house. 
(B) Tomorrow, Daniel and Clara will be meeting to discuss the future. 
(C) The city is always very cold this time of year, but I don't mind it. 
(D) No mistake.

132. 
(A) The students' favorite book this quarter will unfortunately be dropped from the reading list next year. 
(B) I'm not afraid of flying, but I hate turbulence in the air—it makes me really nervous. 
(C) Our boss is really irritated today; I'm not sure why, but I suspect it has something to do with our meeting yesterday. 
(D) No mistakes.

133. 
(A) It rained all week; in spite of wearing galoshes, most people still found it hard to get around. 
(B) Most people wore galoshes all week, it rained, and it was hard to get around. 
(C) Most people wore galoshes. 
(D) No mistakes.

134. 
(A) Janie and I sorted all of the material yesterday so that’s done. 
(B) The lecture was altogether too confusing for me to understand. 
(C) I am completely confident in your ability to pull this off against all odds. 
(D) No mistakes.

135. 
(A) It’s time for the football game to begin so I hope that your friends get here soon. 
(B) Who’s the guy over there in the black jacket, I don’t remember inviting him. 
(C) Something is a little off about the whole thing, but I can’t put my finger on what it might be. 
(D) No mistakes.

136. 
(A) Can we keep this information secret? 
(B) There were far more people here than I expected to see, and I’m glad. 
(C) You’re sure that you got the directions, and that we’re driving the right way? 
(D) No mistakes.

137. 
(A) The fire department called to verify that our alarm has been checked recently. 
(B) Shayna asked: “Why are you being so defensive?” 
(C) I would have liked to see a few more houses before we settled on that one, but I still think we made a good decision. 
(D) No mistake.

138. 
(A) She and I looked over all the final numbers and then left the checks in your box. 
(B) The two universities playing against each other this Saturday are notorious. 
(C) “Let’s make a quick stop on the way there,” he suggested. 
(D) No mistake.

139. 
(A) We cleared out the guest room for you so you’ll have plenty of space to put all of your belongings. 
(B) It’s not too late to apply for the grant, is it? 
(C) American history is a fascinating thing to study. 
(D) No mistake.
Please visit us at www.RedwoodPrep.com to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
Choose the topic sentence that best fits the paragraph.

147. Hours and hours of concentration and repetition are part of the painstaking process of becoming a ballerina. The dance is physically demanding, requiring a very lean, flexible, yet muscular figure. Many young women train for years only to learn that they do not have the physical capacity to dance professionally.
(A) Dance originated in China.
(B) Today, the Moscow Ballet is still considered to be the most prestigious ballet company in the world.
(C) Ballet dancing requires considerable training and technique from a young age.
(D) Ballet is a classical form of dance that originated in Russia and has spread around the world.

Choose the topic sentence that best fits the paragraph.

148. In experiments designed by psychologists, a group of children is given a desirable toy. Overwhelmingly, and against all odds, most groups share the toy. This suggests that human psychology is not as individualistic as some people thought.
(A) Studies show that small children are naturally inclined to share with each other.
(B) Some children do not get along well with others, and it is very difficult for their parents.
(C) Only children are often much more prone to having behavior problems than other children.
(D) It is important to teach children values.

149. Choose the sentence that does not belong in the following paragraph.

(1) The Bahá’í Faith is a monotheistic religion founded by Bahá’u’lláh in nineteenth-century Persia, emphasizing the spiritual unity of all humankind. (2) In modern Iran, people of the Bahá’í faith are persecuted. (3) Bahá’í teachings emphasize the underlying unity of the major world religions. (4) Religious history is seen to have unfolded through a series of divine messengers, each of whom established a religion that was suited to the needs of the time and the capacity of the people. (5) In Bahá’í belief, each messenger taught of the next, and Bahá’u’lláh’s life and teachings fulfill the end-time promises of previous scriptures.

(A) Sentence 3
(B) Sentence 5
(C) Sentence 4
(D) Sentence 2

150. Where should the sentence, “This is why the bear is a greatly respected animal in that culture,” be placed in the paragraph below?

(1) Some evidence has been brought to light on prehistoric bear worship. Anthropologists such as Joseph Campbell have regarded this as a common feature in most of the fishing and hunting-tribes. (2) The prehistoric Finns, along with most Finno-Ugric peoples, considered the bear the spirit of one's forefathers. (3) In many other places in the world, there are creation myths involving bears as well. (4) Many of these myths suggest that the bear was the first animal.

(A) Between sentences 2 and 3.
(B) Between sentence one and 2
(C) After sentence 4.
(D) The sentence does not fit in the paragraph.
### Assessment Exam – Answer Key

#### Verbal

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D</td>
<td>38. A</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>39. B</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
<td>40. B</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>41. A</td>
</tr>
<tr>
<td>5</td>
<td>A</td>
<td>42. C</td>
</tr>
<tr>
<td>6</td>
<td>B</td>
<td>43. A</td>
</tr>
<tr>
<td>7</td>
<td>A</td>
<td>44. A</td>
</tr>
<tr>
<td>8</td>
<td>B</td>
<td>45. C</td>
</tr>
<tr>
<td>9</td>
<td>A</td>
<td>46. A</td>
</tr>
<tr>
<td>10</td>
<td>B</td>
<td>47. B</td>
</tr>
<tr>
<td>14</td>
<td>B</td>
<td>51. D</td>
</tr>
<tr>
<td>15</td>
<td>B</td>
<td>52. C</td>
</tr>
<tr>
<td>18</td>
<td>C</td>
<td>55. B</td>
</tr>
<tr>
<td>19</td>
<td>D</td>
<td>56. C</td>
</tr>
<tr>
<td>20</td>
<td>B</td>
<td>57. D</td>
</tr>
</tbody>
</table>

#### Language

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>D</td>
<td>58. A</td>
</tr>
<tr>
<td>23</td>
<td>A</td>
<td>60. D</td>
</tr>
<tr>
<td>26</td>
<td>B</td>
<td>63. B</td>
</tr>
<tr>
<td>27</td>
<td>A</td>
<td>64. C</td>
</tr>
<tr>
<td>28</td>
<td>C</td>
<td>65. A</td>
</tr>
<tr>
<td>29</td>
<td>A</td>
<td>66. D</td>
</tr>
<tr>
<td>30</td>
<td>C</td>
<td>67. C</td>
</tr>
</tbody>
</table>

#### Mathematics

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>B</td>
<td>68. A</td>
</tr>
<tr>
<td>33</td>
<td>D</td>
<td>70. C</td>
</tr>
<tr>
<td>35</td>
<td>D</td>
<td>72. D</td>
</tr>
<tr>
<td>36</td>
<td>C</td>
<td>73. D</td>
</tr>
<tr>
<td>37</td>
<td>B</td>
<td>74. A</td>
</tr>
</tbody>
</table>

Please visit us at [www.RedwoodPrep.com](http://www.RedwoodPrep.com) to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
Assessment Exam Explanations

1. D
Driver, chauffer, and escort all name professions whose responsibility it is to transport individuals. An automobilist simply drives a car, and has no connection to other individuals.

2. B
From highest to lowest volume:
   River A
   River B
   River C

   River C has less volume than River A.

3. B
Epoch and era both refer to an extended period of time. A declaration is an official communication, and a decision a choice from among options.

4. D
Shiver, tremble, and quiver all refer to rapid shaking. Flurry refers to a brief commotion.

5. A
Bouyant is defined as capable of floating.

6. B
Trial, hearing, and case are all legal terminology. Disagreement is a generic term for a conflict of opinions.

7. A
From most common to least common:
   Yellow
   Blue
   Red
   Red
   Brown

   Yellow is more common than Brown.

8. B
Idiomatic indicates relation to language peculiar to a certain community. Standardized means common across all communities.

9. A
A rug covers a floor. A curtain covers a window—not a building, room, or secret.

10. B
Office, house, and store are all specific types of buildings. Building names the generic category to which the other buildings belong.

11. C
To imply is to express indirectly. To suggest is to express as a possibility.

12. A
A see-saw, slide, and swings are all pieces of equipment that can be found at a playground, while the playground is the location at which they can be found.

13. B
Hunches are derived from instinct. Knowledge is derived from facts.

14. B
From most to fewest goals scored:

   Bill   Westen
   Tom   Tom
   Jack

   Jack scored fewer goals than Bill.
15. B
The use of film to communicate objects to others is documentary. The use of writing to communicate objects to others is journalistic.

16. C
Glove, mitten, and mitt are all clothing that can be worn on the hand. A ring is not clothing but jewelry.

17. D
Deliberate means resulting from careful and thorough consideration. Intentional means done according to a chosen design.

18. C
Disclosing means making known or public. Revealing means exposing something hidden.

19. D
Vigorous means full of strength and energy. Lifeless means without the energy that marks living things.

20. B
Validation is confirmation of the legitimacy of something. Confirmation means the giving of assurance of validity.

21. D
Tiger, lion, and cheetah are all feline jungle predators. Tabbies are tame house cats.

22. C
Benevolent indicates a disposition to doing good. Kind means of a sympathetic or helpful nature.

23. A
Dejected, downhearted, and disconsolate all indicate unhappy moods. Debunked means exposed as false.

24. C
Asleep indicates being in a state of sleep. Awake means not asleep.

25. B
Vigilant means watchful. Oblivious means unaware of one’s surroundings.

26. B
Recycling is the process by which newspaper becomes capable of being re-used. Composting is the process by which food becomes capable of being re-used.

27. A
Ring, necklace, and earring all name specific types of jewelry. Jewelry names the generic category of clothing to which rings, necklaces and earrings belong.

28. C
A sedan is a type of car; a dinghy is a type of boat.

29. A
From worst to least:

<table>
<thead>
<tr>
<th>Nantz</th>
<th>Owsley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill</td>
<td>Bill</td>
</tr>
<tr>
<td>Samuelson</td>
<td>Samuelson</td>
</tr>
</tbody>
</table>

Owsley teaches better than Samuelson.

30. C
Squalor means derelict and dirty – the opposite of cleanliness.
Quantitative Skills

31. B
The pattern is +5, +10, repeat.

32. A
\[x^2 = \frac{36}{4}\]
\[x^2 = 9\]
\[x = \pm3\]

33. D
II can be folded along the diagonal and III can be folded along the middle vertical line displaying symmetry.

34. A
The pattern is -7, -7 ad infinitum.
\[32 - 7 = 25\]

35. D
I, II, and III all equal 15.

36. C
The pattern is -2, +3, repeat.

37. B
\[x = (\frac{1}{3})18 - 3\]
\[x = 6 - 3\]
\[x = 3\]

38. A
I = 14
II = 14
III = 16

39. B
Using the Pythagorean Theorem:
\[5^2 + (BC)^2 = 13^2\]
\[25 + (BC)^2 = 169\]
\[(BC)^2 = 144\]
\[BC = 12\]

40. B
The pattern is -4, -8, repeat

41. A
\[\frac{5}{2}x = 35 \div 7\]
\[\frac{5}{2}x = 5\]
\[x = 5 \left(\frac{2}{5}\right)\]
\[x = 2\]

42. C
The pattern is -1, -3, -5, -7, -9, -11
Start by subtracting 1, then subtract by the next highest odd number each iteration.

43. A
I = 0.70
II = 0.07
III ≈ 0.14

44. A
\[(6)(3) = \left(\frac{2}{3}\right)x\]
\[18 = \left(\frac{2}{3}\right)x\]
\[54 = 2x\]
\[x = 27\]

45. C
The pattern is +7, repeat

46. A
The sum of the interior angles of a triangle is 180 degrees. The right angle BCA measures 90 degrees. The remaining interior angles must sum to 90 degrees.

47. B
The pattern is -1, -10, repeat.

48. B
\[\frac{x}{3} = 7 + 2\]
\[\frac{x}{3} = 9\]
\[x = 27\]

Please visit us at [www.RedwoodPrep.com](http://www.RedwoodPrep.com) to sign up for your HSPT course. We now offer an online HSPT course. To register, visit our site, press “Sign-up” button, select “HSPT” and “CA – ONLINE” for the area. © 2015 RedwoodPrep
49. B
Apply the distributive property to each of items I-III.

I: \(4x + 4y\)
II: \(4x + 4y\)
III: \(4x + 4y + x\)

50. A
The pattern is, advance the letter four places (e.g. A \(\rightarrow\) E) and +4 to the number.

51. D
\[
\begin{align*}
x &= (\frac{3}{2})4 - 3 \\
x &= 6 - 3 \\
x &= 3
\end{align*}
\]

52. C
5 is a ‘dummy’ number. Ignoring the 5s, the pattern is -3, -2, repeat

53. B
The pattern requires multiplying each number by 2 to get the next number.

54. C
\[
\begin{align*}
x &= (\frac{3}{7})35 + 12 \\
x &= 15 + 12 \\
x &= 27
\end{align*}
\]

55. B
\[
\begin{align*}
x &= 6^2 - 9 \\
x &= 36 - 9 \\
x &= 27
\end{align*}
\]

56. C
The pattern is +5, +10, repeat

57. D
The hypotenuse of a right triangle must be longer than either of its legs.

58. A
The direct effect of the treat was that it “divided all land to be discovered outside of Europe,” as stated in the first sentences of the reading.

59. C
Described in detail in the final paragraph.

60. D
Sentence two of the third paragraph. The Monarchs are the King & Queen.

61. A
First sentence of reading.

62. D
Described in the second sentence of paragraph three.

63. B
Explained in the final sentence of the reading.

64. C
Answers A and B introduce topics whose successful treatment would require more information than that contained in the reading. Answer D would function better as the title of a more argumentative composition. C is appropriately focused and informatively pitched.

65. A
Indicated in sentence one of paragraph three.

66. D
Mentioned in the final sentence of paragraph three.
67. C
Answer C is the only answer to reference colonization. The Treaty of Tordesillas was an accord that regulated colonization, and colonization only.

68. A
Only answer A gives an answer that would allow the author to fish more, the author’s favorite activity.

69. C
Final sentence of paragraph one.

70. C
Final sentence of the reading.

71. B
Answer B, hiking in the woods, is the answer that most contains those elements of trout fishing that the author identifies as important to his happiness.

72. D
Title A would be better suitable for an argumentative essay. Title B is too broad. Title C supports an opinion—that trout fishing is unimportant—that is inconsistent with those of the author. Title D accurately represents the passage.

73. D
Fourth sentence of paragraph one.

74. A
The answer is found in paragraph three.

75. A
The answer appears in the fourth sentence of paragraph one.

76. C
The answer can be found in the first sentence of paragraph two.

77. B
The correct answer appears in the final sentence of paragraph three.

78. B
Brink means edge. Verge means something that limits or bounds.

79. C
Turmoil means a state of agitation. Conflict means opposing action of incompatible forces.

80. B
Defiant means showing resistance. Rebellious means resisting management.

81. A
To abolish means to end the effect of. Eliminate means to put an end to.

82. D
Proclamation means something publicly declared.

83. C
Distinct can mean readily apprehended. Noticeable means likely to be treated with attention.

84. B
Indigenous means being originated naturally in a region. Native means belonging to a particular place by birth.

85. D
Restrictive means confining within bounds. Limiting means functioning as something that confines.

86. A
Emblem means an object symbolizing another object or idea.
87. D
To depict means to show as a picture. To represent means to portray or exhibit.

88. C
To commemorate means to call to remembrance.

Mathematics

89. C
The hundredths position is the position two spaces to the right of a decimal point (e.g. 0.0X00)

90. B
\[
\begin{align*}
5(-2)^4 \\
5(16) \\
80
\end{align*}
\]

Notice that a negative number to an even power is a positive number.

91. B
For example:

\[
\begin{array}{c}
100 \\
100)10,000 \\
100 \\
0 \\
0 \\
0 \\
0 \\
0 \\
0 \\
10,000.00 \rightarrow 100.0
\end{array}
\]

92. C
Reciprocals take the form X to 1/X

93. A
2 yards = 72 inches
72 inches / 12 inches
6/1

94. C
\[
\begin{align*}
12^2 &= 144 \\
X^2 &= 150 \\
13^2 &= 169
\end{align*}
\]

95. C
\[
\begin{align*}
1/3 &= 33.3\% \\
2/5 &= 40\% \\
33.3 &< 40
\end{align*}
\]

96. D
An irrational number is an infinite, non-repeating decimal. Potential answer A is not an infinite decimal. Potential answers B and C are repeating decimals. Potential answer D, pi, is infinite and non-repeating.

97. B
In triangle BDE, legs BD and ED have the same length. Because triangles BDE and BAC are similar, their corresponding legs are related by the same ratio. In other words, because the ratio BD/ED is 4/4=1, the ratio BA/CA is 9/9=1.

\[
AD = BA - BD \\
AD = 9 - 4 \\
AD = 5
\]

98. D
A fraction is written in simplest form when all common factors of the numerator and the denominator have been factored out.

\[
0.36 = \frac{36}{100} = \frac{9(4)}{25(4)} = \frac{9}{25}
\]

99. A
The least common multiple of two numbers is the smallest number that has both of the numbers as factors.

\[
\begin{align*}
4(3) &= 12 \\
6(2) &= 12
\end{align*}
\]
100. B
If Ray can clean 1 room in 4 hours, then he can clean 1/4 of a room in 1 hour. If Phil can clean 1 room in 6 hours, then he can clean 1/6 of a room in 1 hour. Cleaning together, the pair can clean 1/4 + 1/6 = 5/12 of a room in 1 hour. How long does it take them to clean 1 room together?

\[
\frac{5}{12}(x) = 1
\]
\[
x = \frac{12}{5}
\]
\[
= 2 \text{ hours and } 25 \text{ minutes}
\]

101. D
\[
\frac{1}{7} - \frac{4}{5} = \frac{15}{7} - \frac{4}{5}
\]
\[
= \frac{75}{35} - \frac{28}{35}
\]
\[
= \frac{47}{35}
\]
\[
= \frac{1}{35}
\]

102. D
E = Emily
D = Diane
E = 27

E = 3D - 24
(27) = 3D - 24
51 = 3D
D = 17

103. A
86 = (9/5)C + 32
54 = (9/5)C
270 = 9C
C = 30

104. A
3x - 24 = x + 6
2x = 30
x = 15

105. B
x = change
10 - (1.00 + 0.07)[2(3.90)] = x
10 - (1.07)(7.80) = x
10 - 8.346 = x
1.654 = x
$1.65 = x$
111. A
The area of the wall is 12 times 20, or 240 square feet. Therefore, two walls comprise 480 square feet. Multiplying 480 times 2.50 yields $1200.

112. D
The area of a circle is \[ A = \pi r^2 \]
\[ = \pi (3)^2 \]
\[ = 9\pi \]

113. B
\[ \frac{7}{9}x = 56 \]
\[ x = 56 \left( \frac{9}{7} \right) \]
\[ x = 8(9) \]
\[ x = 72 \]

114. C
Multiply both numbers keeping in mind that a negative times a positive yields a negative.

115. A
Multiply the number using multiplication rules. Since there are three decimal places in the first number, move the decimal three places to the left of the product.

116. B
\[ x - 5 < 11 \]
\[ x < 16 \]

117. A
Remember to line up the decimal point when adding.

118. D
First move the decimal to the right one place for both the divisor and the dividend. Then use long division to produce the answer.

119. C
\[ (1,000 \div 48) = 20 \frac{5}{12} \]
However, there is no such thing as \( \frac{5}{12} \) of a bus. Therefore, 21 busses are needed (for those remaining five students).

120. B
21,000 \div 100
= 210 hundred dollar spendatures.
Therefore, \( 5.18 \times 210 = 1,087.80 \)

Language

121. B
When a directly quoted complete sentence is interrupted by non-quoted material ("the teacher told us"), the first word of the second half of the directly quoted sentence ("but") should not be capitalized.

122. D
No mistakes.

123. C
City should not be capitalized as it is not a proper noun.

124. B
The correct verb for describing a person’s reclining into a horizontal position is "lie."

125. B
The correct construction is “each other’s.”

126. C
Like should be replaced by as.
127. A
In this sentence, the pronoun *I* follows the preposition *to* and serves as its object. For this reason, the subjective pronoun *I* should be replaced by the objective pronoun *me*.

128. A
The “word” *a lot* does not exist. It should be replaced with *a lot*.

129. C
The comma in this sentence is unnecessary. The noun *grade* is preceded by only a single adjective: *failing*.

130. B
Because the window is transforming from one state into another—not within one constant state—the correct preposition is not *to*, but *into*.

131. A
*Wednesday* should be capitalized.

132. D
No mistakes.

133. B
This “sentence” is a comma splice. Three complete sentences are joined together with only commas.

134. B
When indicating excessiveness, the correct word is *too*, not *to*.

135. B
This “sentence” is a comma splice. Two complete sentences are joined together with only a comma.

136. B
The sentence is missing a period.

137. B
Within a sentence, non-quoted material is separated from a direct quotation by a comma, not a colon.

138. D
No mistakes.

139. A
This is a compound sentence joined by the conjunction *so*. Because the two independent clauses are relatively long, the conjunction must be preceded by a comma.

140. D
No mistakes.

141. A
The word is correctly spelled *disappointed*.

142. C
The word is correctly spelled *analysis*.

143. A
The word is correctly spelled *occurrence*.

144. B
The word is correctly spelled *imperturbable*.

145. D
No mistakes.

146. C
Potential answers A and B do not develop the ideas of old uncomfortable mattresses or back pain. Potential answer D develops the idea of back pain but caused by an unrelated reason to the given sentence. Only potential answer A develops both the ideas of old mattresses and back problems.
147. C
Potential answers A, B, and D each introduces ideas not developed in the given paragraph: A) the geographic origins of dance, B) prestigious professional dance troupes, and D) the geographic origins of dance. Only potential answer C introduces all of the ideas developed in the given paragraph and no others.

148. A
Potential answer A introduces an idea that runs contrary to the content of the given paragraph. Potential answer C introduces an idea not developed in the paragraph: the effect of being an only child on sharing. Potential answer D offers an argument that is not evaluated in the given paragraph. Only potential answer A introduces all of the ideas developed in the paragraph and no others.

149. D
No mistakes.

150. A
Potential answer A is correct because the given sentence develops an idea introduced in sentence 2—the cultural role of the bear—and introduces an idea developed in the sentence 3—the presence of bears in creation myths.