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Carla Kirkland Chan Cleveland

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1,001 Praxis Core Practice Questions



by Carla Kirkland and Chan Cleveland



1,001 Praxis[®] Core Practice Questions For Dummies[®]

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Introduction

elcome to 1,001 Praxis Core Practice Questions For Dummies. Don't take the dummies thing literally — you're obviously smart and capable. You've chosen to shape the minds of future generations through education. And on that quest, you will encounter obstacles. At least one of those is a Praxis exam.

This book is designed to give you lots of exposure to the kinds of questions you'll see on the very first test for teachers: the Praxis Core Academic Skills for Educators exam (referred to as Praxis or Praxis Core from here on). To clear this hurdle, you need some practice and pointers on how best to answer the questions. This book provides that and more: It goes beyond provid-ing relevant practice questions by showing simple and effective ways to solve challenging Praxis problems.

What You'll Find

The Praxis Core practice problems in this book are divided into four chapters based on skills involving Math, Reading, Writing, and Essays. Questions are adjusted and repeated to give you practice and mastery. If you struggle with one question, you can find a group of similar questions to practice and hone your skills. This book serves as an effective standalone refresher of Praxis basics or as an excellent companion to the latest edition of *Praxis Core For Dummies* (Wiley). Either way, this book helps you identify subject areas you need to work on so you can practice them until you're a pro and thus prepare for test day.

If you get a problem wrong, don't just read the answer explanation and move on. Instead, come back to the problem and solve it again, this time avoiding the mistake you made the first time. This is how you improve your skills and figure out how to solve the problems correctly and easily.

Whatever you do, stay positive. The challenging problems in this book aren't meant to discourage you; they're meant to show you how to solve and master them.

How This Book Is Organized

The first part of this book gives you questions covering math, reading, and writing. All the answers and explanations are in the second part of the book.

The math subtest covers the following topics:

- Number and quantity: These questions focus on your understanding of order among integers, the representation of a number in more than one way, place value, whole number properties, equivalent computational procedures, ratios, proportions, and percentages.
- Algebra and functions: These questions assess your ability to handle equations and inequalities, recognize various ways to solve a problem, determine the relationship between verbal and symbolic expressions, and interpret graphs. In this section, you also encounter questions that test your knowledge of basic function definitions and the relationship between the domain and range of any given function.
- Geometry: These questions assess your the understanding and application of the characteristics and properties of geometric shapes, the Pythagorean theorem, transformations, and the use of symmetry to analyze mathematical situations. (Knowledge of basic U.S. and metric systems of measurement is assumed.)
- Statistics and probability: These questions assess your ability to read and interpret the visual display of quantitative information; understand the correspondence between data and graph; make inferences from a given data display; determine mean, median, and mode; and assign probability to an outcome.

The reading questions in this book cover the following topics:

- >> Key ideas and details: These questions require you to read text closely, make logical inferences, connect specific details, address author differences, and determine uncertain matters.
- Craft, structure, and language skills: These questions require you to interpret words and phrases, recognize the tone of word choices, analyze text structure, assess points of view, and apply language knowledge to determine fact or opinion, determine word meanings, and understand a range of words and their nuances.
- Integration of knowledge and ideas: These questions require you to analyze diverse media content, evaluate arguments in texts, and analyze how two or more texts address similar themes.

On the writing subtest, you find these types of questions:

- Text types, purposes, and production: These questions require you to edit and revise text passages.
- >> Language skills: These questions require you to demonstrate command of English grammar, usage, capitalization, and punctuation.
- Research skills: These questions assess your understanding of doing research and citing sources.

As part of the writing subtest, you'll also be required to demonstrate knowledge and research skills by writing two essays based on information presented. One is an argumentative essay; the other is an explanation of a topic.

Beyond the Book

Your purchase of this book gives you so much more than a thousand (and one) problems to work on to improve your skills with the Praxis Core. It also comes with a free, one-year subscription to hundreds of practice questions online. Not only can you access this digital content anytime you want, on whichever device is available to you, but you can also track your progress and view personalized reports that show which concepts you need to study the most.

What you'll find online

The online practice that comes free with this book offers you the same questions and answers that are available here. Of course, the real beauty of the online problems is your ability to customize your practice. In other words, you get to choose the types of problems and the number of problems you want to tackle. The online program tracks how many questions you answer correctly or incorrectly so that you can get an immediate sense of which topics require more of your attention.

This product also comes with an online Cheat Sheet that helps you increase your odds of performing well on the Praxis Core. To get the Cheat Sheet, simply go to www.dummies.com and type "1,001 Praxis Core Practice Questions For Dummies Cheat Sheet" in the Search box. (No access code required. You can benefit from this info even before you register.)

How to register

To gain access to practice online, all you have to do is register. Just follow these simple steps:

- Register your book or ebook at Dummies.com to get your PIN. Go to www.dummies.com/go/ getaccess.
- 2. Select your product from the dropdown list on that page.
- **3.** Follow the prompts to validate your product, and then check your email for a confirmation message that includes your PIN and instructions for logging in.

If you do not receive this email within two hours, please check your spam folder before contacting us through our Technical Support website at http://support.wiley.com or by phone at 877-762-2974.

Now you're ready to go! You can come back to the practice material as often as you want — simply log on with the username and password you created during your initial login. No need to enter the access code a second time.

Your registration is good for one year from the day you activate your PIN.

Where to Go for Additional Help

The solutions to the practice problems in this book are meant to walk you through how to get the right answers; they're not meant to teach the material. If certain concepts are unfamiliar to you, you can find help at www.dummies.com. Just type "1,001 Praxis Core" into the Search box to turn up a wealth of Praxis-related information.

If you need more detailed instruction, check out *Praxis Core For Dummies*, also by Carla Kirkland and Chan Cleveland.

The Questions

IN THIS PART . . .

Practice basic math, algebra, geometry, and statistics problems.

Read passages and answer reading comprehension questions.

Work through grammar and writing questions.

Answer research questions and write essays.

Chapter 1 Math

he math test of the Praxis Core exam includes 56 questions in four major areas of math. This part of the book explores each of those areas and the general math topics that are covered on the test. In this chapter, you can gain further understanding of the skills you need and get perspective on an array of questions and approaches to various math topics.

The Problems You'll Work On

Math questions may be multiple choice, fill-in, or select all that apply. When working through the questions in this chapter, be prepared to answer questions on these topics:

- Number and quantity, including topics such as basic operations, number form conversions, order of operations, number order, sequences, word problems, and measurement
- Algebra, which includes combining like terms, using given variable values, solving equations and inequalities, and solving algebraic word problems
- Geometry, which covers basic geometric building blocks, angles, polygons and circles, threedimensional figures, and the coordinate plane
- Statistics and probability, involving representations of data, central tendencies, probability calculations, and scientific notation

What to Watch Out For

Various types of mistakes can occur when you're working math problems. Be on the lookout for common errors such as these:

- >> Overlooking part of a rule or confusing one rule with another
- >> Misusing the four-function online calculator
- >> Confusing one mathematical term with another
- >> Using the incorrect expression to represent what's described
- >> Assuming all geometric figures are drawn to scale
- >> Stopping before answering the final question in a multi-step problem

Number and Quantity

1. What is the value of the following sum?

-3+14-(-7)

- (A) 24
- (B) -10
- (C) 4
- (D) -24
- (E) 18
- **2.** What is the sum of -5, -10, 4, and -7?
 - (A) -18
 - (B) -26
 - (C) 18
 - (D) -4
 - (E) 26
- **3.** Which of the following is the value of this product?
 - (5)(-1)(3)(-2)(1)(-3)(-1)
 - (A) 45
 - (B) -90
 - (C) -45
 - (D) 90
 - (E) 30
- **4.** What is the value of $(-1)^{379}$?
 - (A) 379
 - (B) 1
 - (C) -379
 - (D) -1
 - (E) 378
- **5.** Which of the following is a factor of 63?
 - (A) 31
 - (B) 21
 - (C) 13
 - (D) 16
 - (E) 6

- **6.** Which of the following is NOT a factor of 42?
 - (A) 7
 - (B) 6
 - (C) 14
 - (D) 21
 - (E) 18
- **7.** All of the following are multiples of 53 EXCEPT
 - (A) 106
 - (B) 265
 - (C) 370
 - (D) 159
 - (E) 318
- **8.** Ninety is NOT a multiple of which of the following?
 - (A) 30
 - (B) 5
 - (C) 15
 - (D) 23
 - (E) 3
- **9.** What number is the greatest common factor of 28 and 72?
 - (A) 4
 - (B) 1
 - (C) 7
 - (D) 2
 - (E) 14
- **10.** Which of the following is NOT a common factor of 84 and 144?
 - (A) 12
 - (B) 6
 - (C) 1
 - (D) 24
 - (E) 21

- **11.** What is the least common multiple of 18 and 24?
 - (A) 48
 - (B) 72
 - (C) 144
 - (D) 432
 - (E) 6
- **12.** Twenty-four is the least common multiple of 8 and which of the following numbers?
 - (A) 12
 - (B) 36
 - (C) 4
 - (D) 16
 - (E) 2
- **13.** What is the cube of 5?
 - (A) 25
 - (B) 15
 - (C) 625
 - (D) 125
 - (E) 50
- **14.** Which of the following numbers to the 4th power is 81?
 - (A) 27
 - (B) 3
 - (C) 9
 - (D) 36
 - (E) 13
- **15.** What is the square root of 576?
 - (A) 34
 - (B) 56
 - (C) 24
 - (D) 44
 - (E) 26

- **16.** If the cube root of 64 is multiplied by the greatest common factor of 20 and 45, what is the result?
 - (A) 100
 - (B) 20
 - (C) 80
 - (D) 60
 - (E) 40
- **17.** What is half the square of the least common multiple of 14 and 21?
 - (A) 882
 - (B) 98
 - (C) 1,764
 - (D) 220.5
 - (E) 196
- **18.** Which of the following is the value of this expression?
 - $\left(\left(2\right)^{3}\right)^{2}$
 - (A) 8
 - (B) 16
 - (C) 32
 - (D) 72
 - (E) 64
- **19.** What is the greatest common factor of the square of 6 and the least common multiple of 8 and 9?
 - (A) 72
 - (B) 6
 - (C) 24
 - (D) 36
 - (E) 18

20. Which of the following is a counterexample to this statement?

> With the exception of 1, the common factors of 24 and 120 are even.

- (A) 3
- (B) 12
- (C) 10
- (D) 9
- (E) 6
- **21.** Which of the following is the simplified form of $\frac{12}{16}$?
 - (A) $\frac{4}{3}$
 - (B) $\frac{3}{4}$

 - (C) $\frac{6}{8}$
 - (D) $\frac{12}{16}$
 - (E) $\frac{2}{2}$
- **22.** What is $\frac{20}{70}$ in simplest form?
 - (A) $\frac{4}{5}$
 - (B) $\frac{27}{77}$
 - (C) $\frac{2}{7}$
 - (D) $\frac{3}{8}$

 - (E) $\frac{4}{14}$
- **23.** The fraction $\frac{4}{7}$ is the simplified form of which of the following fractions?
 - (A) $\frac{5}{30}$
 - (B) $\frac{16}{26}$
 - (C) $\frac{28}{49}$

 - (D) $\frac{6}{15}$
 - (E) $\frac{8}{15}$

- **24.** If $\frac{55}{99}$ of the songs played on a radio station in a year were rock and roll songs, which of the following also represents the portion of rock and roll songs that were played on the station?
 - (A) $\frac{15}{19}$
 - (B) $\frac{50}{91}$
 - (C) $\frac{18}{35}$

 - (D) $\frac{8}{13}$
 - (E) $\frac{5}{0}$

25. Which of the following is $\frac{324}{918}$ in simplest form?

- (A) $\frac{5}{18}$
- (B) $\frac{6}{17}$
- (C) $\frac{7}{16}$
- (D) $\frac{8}{15}$
- (E) $\frac{5}{13}$
- **26.** Is $\frac{84}{96}$ equal to $\frac{14}{16}$?
 - (A) Yes
 - (B) No
- **27.** Which of the following fractions is equal to $8\frac{2}{5}$?
 - (A) $\frac{17}{2}$
 - (B) $\frac{42}{13}$
 - (C) $\frac{42}{5}$
 - (D) $\frac{48}{5}$

 - (E) $\frac{5}{42}$
- **28.** What is $9\frac{3}{8}$ in simplified fraction form? Write your answer.

- **29.** What fraction is the simplified form of $-4\frac{3}{10}$?
 - (A) $-\frac{37}{10}$
 - (B) $-\frac{41}{10}$
 - (C) $-\frac{21}{5}$
 - (D) $-\frac{47}{10}$ (E) $-\frac{43}{10}$
- **30.** Which of the following mixed numbers is equal to $\frac{81}{8}$?
 - (A) $9\frac{1}{8}$
 - (B) $1\frac{1}{8}$
 - (C) $10\frac{1}{4}$
 - (D) $10\frac{1}{8}$
 - (E) $11\frac{1}{4}$
- **31.** Which of the following is equal to $\frac{37}{2}$? (A) $16\frac{1}{2}$
 - (B) $15\frac{2}{5}$
 - (C) $15\frac{1}{2}$
 - (D) $16\frac{2}{7}$
 - (E) $18\frac{1}{2}$
- **32.** The fraction $\frac{77}{11}$ is equal to which of the following?
 - (A) $7\frac{1}{7}$
 - (B) $6\frac{6}{7}$
 - (C) 7
 - (D) $7\frac{7}{11}$
 - (E) $8\frac{1}{7}$

- **33.** Which of the following is the sum of $\frac{2}{5}$ and $3\frac{1}{5}$?
 - (A) $3\frac{2}{5}$
 - (B) $4\frac{1}{5}$
 - (C) 4
 - (D) $3\frac{3}{10}$
 - (E) $3\frac{3}{5}$

34. Which of the following equals the value of this expression?

- $5\frac{2}{3} 7\frac{4}{5}$ (A) $1\frac{7}{15}$ (B) $-2\frac{2}{15}$ (C) $2\frac{1}{15}$ (D) -2
- (E) $-1\frac{7}{15}$
- **35.** What is the product of $2\frac{5}{8}$ and $-1\frac{5}{7}$? (A) $-4\frac{5}{9}$ (B) $-2\frac{5}{8}$
 - (C) $-3\frac{2}{7}$
 - (D) $-4\frac{1}{2}$
 - (E) $-2\frac{3}{7}$
- **36.** What is the quotient?
 - $\frac{4}{9}\sqrt{11\frac{4}{5}}$
 - (A) $\frac{20}{531}$
 - (B) $\frac{3}{201}$
 - (C) $\frac{37}{58}$
 - (D) $\frac{531}{20}$
 - (E) $\frac{21}{25}$

- **37.** What is the value of $-9\frac{7}{8}$ divided by $-10\frac{5}{12}$?
- **38.** Which of the following is $\frac{4}{5}$ in decimal form?
 - (A) 0.8
 - (B) 0.4
 - (C) 0.5
 - (D) 0.1
 - (E) 0.2

39. Which of the following is equal to $\frac{1}{8}$?

- (A) 0.2
- (B) 0.8
- (C) 0.7
- (D) 0.125
- (E) 0.15
- **40.** Which of the following is 0.34 expressed as a fraction in simplest form?
 - (A) $\frac{17}{50}$
 - (B) $\frac{17}{100}$
 - (C) $\frac{34}{100}$

 - (D) $\frac{1}{34}$
 - (E) $\frac{34}{1}$
- **41.** The number 0.75 can be expressed as which percent?
 - (A) 0.075%
 - (B) 750%
 - (C) 0.75%
 - (D) 0.0075%
 - (E) 75%
- **42.** The fraction $\frac{1}{4}$ can be represented as what percent?
 - (A) 2.5%
 - (B) 0.25%
 - (C) 250%
 - (D) 25%
 - (E) 0.025%

- **43.** Which of the following is 42% in simplest fraction form?
 - (A) $\frac{21}{100}$
 - (B) $\frac{42}{100}$
 - (C) $\frac{21}{50}$

 - (D) $\frac{100}{42}$
 - (E) $\frac{2}{5}$
- 44. What is 34.848% in decimal form?
 - (A) 34.848
 - (B) 3,484.8
 - (C) 3.4848
 - (D) 348.48
 - (E) 0.34848
- **45.** Which of the following is 496.032% expressed as a decimal number?
 - (A) 496032.0
 - (B) 49.6032
 - (C) 49,603.2
 - (D) 496.032
 - (E) 4.96032
- **46.** What is $-2\frac{1}{8}$ in decimal form?
 - (A) -2.125
 - (B) -2.25
 - (C) -2.1
 - (D) -2.8
 - (E) -2.012
- **47.** Which of the following is $8\frac{2}{5}$ expressed as a percent?
 - (A) 8.2%
 - (B) 8.4%
 - (C) 0.08%
 - (D) 80.4%
 - (E) 840%

- **48.** What is the sum of $\frac{1}{12}$ and 3.178, rounded to the nearest thousandth?
 - (A) 3.3
 - (B) 3.26
 - (C) 3.262
 - (D) 3.026
 - (E) 3.261
- **49.** Which of the following is the sum of this expression, rounded to the nearest tenth?

46.893% + 15.0723

- (A) 15.54123
- (B) 15.6
- (C) 4,704.4
- (D) 15.5
- (E) 4,704.3
- **50.** Which of the following is the product of $\frac{3}{20}$ and -14.4?
 - (A) 2.16
 - (B) -2
 - (C) -2.16
 - (D) 2
 - (E) -2.07
- **51.** Which of these numbers is greater? (A) $\frac{3}{4}$
 - (B) 0.76
- **52.** Which of these numbers has the greatest value?

$$\frac{25}{8}$$
 $3\frac{1}{9}$ 3.1 3.11 $\frac{16}{5}$

(A)
$$\frac{25}{8}$$

(B)
$$3\frac{1}{9}$$

- (C) 3.1
- (D) 3.11
- (E) $\frac{16}{5}$

53. Which of these numbers has the lowest absolute value?

$$\begin{array}{c|cccccc} -\frac{3}{8} & \frac{23}{50} & -0.47 & 0.471 & \frac{5}{12} \\ (A) & -\frac{3}{8} \\ (B) & \frac{23}{50} \\ (C) & -0.47 \\ (D) & 0.471 \\ (E) & \frac{5}{12} \end{array}$$

- **54.** Which of the following is the correct order of these numbers from least to greatest?
 - $\frac{27}{20} \quad 1\frac{9}{20} \quad 134\% \quad 1.36 \quad 1\frac{7}{10}$ (A) $1\frac{7}{10}$, 1.36, 134%, 1.36, $1\frac{7}{10}$ (B) $\frac{27}{20}$, $1\frac{9}{20}$, 1.36, 134%, $1\frac{7}{10}$ (C) 134%, $\frac{27}{20}$, 1.36, $1\frac{9}{20}$, $1\frac{7}{10}$ (D) $\frac{27}{20}$, $1\frac{9}{20}$, 134%, 1.36, $1\frac{7}{10}$ (E) $1\frac{7}{10}$, $1\frac{9}{20}$, 1.36, $\frac{27}{20}$, 134%
- **55.** Which of the following is the correct order of these numbers from greatest to least?
 - 4.1 $\frac{411}{100}$ $\frac{105}{25}$ $4\frac{3}{20}$ 409% (A) 409%, 4.1, $\frac{411}{100}$, $4\frac{3}{20}$, $\frac{105}{25}$ (B) $\frac{105}{25}$, $4\frac{3}{20}$, 4.1, $\frac{411}{100}$, 409% (C) 409%, 4.1, $4\frac{3}{20}$, $\frac{411}{100}$, $\frac{105}{25}$ (D) $\frac{105}{25}$, 409%, $4\frac{3}{20}$, $\frac{411}{100}$, 4.1 (E) $\frac{105}{25}$, $4\frac{3}{20}$, $\frac{411}{100}$, 4.1, 409%

- **56.** Which of the following numbers has a greater magnitude than $-12\frac{5}{8}$?
 - (A) 1,250%
 - (B) $-12\frac{11}{16}$
 - (C) $12\frac{13}{24}$
 - (D) -12.51
 - (E) $\frac{23}{2}$
- **57.** What is the correct order of absolute value for these numbers, from greatest to least?

5.14
$$-5\frac{4}{25}$$
 $-\frac{128}{25}$
(A) $-5\frac{4}{25}$, 5.14, $-\frac{128}{25}$
(B) $-\frac{128}{25}$, 5.14, $-5\frac{4}{25}$
(C) $-5\frac{4}{25}$, $-\frac{128}{25}$, 5.14
(D) 5.14, $-\frac{128}{25}$, $-5\frac{4}{25}$
(E) $-\frac{128}{25}$, $-5\frac{4}{25}$, 5.14

58. The distance from one labeled coordinate to the next on the number line is the same in every case. What is the value of *y*?



- (A) 17.5
- (B) 18.5
- (C) 17
- (D) 16
- (E) 18

59. For the number line, if *D* is halfway between *C* and *E*, what is the coordinate of *D*?



- (A) 2.2
- (B) 2.4(C) 1.2
- (D) 1.6
- (D) 1.0
- (E) 1.1
- **60.** For this number line, the distance from *P* to *Q* is half the distance from *Q* to *R*, and that distance is half the distance from *R* to *S*. The coordinate of *P* is 4, and the coordinate of *R* is 10. What is the coordinate of *S*?





(B) 16

- (C) 20
- (D) 24
- (E) 14

- **61.** A number line contains the points *A*, *B*, *C*, and *D*. *C* is half the distance from *B* to *D*, and *B* is half the distance from *A* to *C*. Which of the following statements is true?
 - (A) The distance from *A* to *B* is greater than the distance from *C* to *D*.
 - (B) The distance from *A* to *B* is less than the distance from *C* to *D*.
 - (C) The distance from *B* to *D* is greater than the distance from *A* to *C*.
 - (D) The distance from *B* to *D* is equal to the distance from *A* to *B*.
 - (E) The distance from *A* to *B* is equal to the distance from *C* to *D*.
- **62.** For this number line, *T* is halfway between *M* and *W*. What is the coordinate of *T*?



- (A) 3.5
- (B) 3
- (C) 4
- (D) 3.25
- (E) 3.75
- **63.** What is the seventh term of this sequence?

5, 9, 13, 17, . . .

- (A) 21
- (B) 20
- (C) 29
- (D) 24
- (E) 33

- **64.** What term belongs in the blank in this sequence?
 - 14, 17, ____, 23, . . .
 - (A) 18
 - (B) 20
 - (C) 26
 - (D) 22
 - (E) 29

65. What is the first term in this sequence?

- ____, 6, 12, 24, . . .
- (A) 5
- (B) 2
- (C) 4
- (D) 3
- (E) 1
- **66.** The first term of a geometric sequence is 1. The fifth term is 81. How many times greater is each term, after the first term, than the preceding term?
 - (A) 2
 - (B) 9
 - (C) 4
 - (D) 18
 - (E) 3
- **67.** Is this sequence arithmetic or geometric?
 - $10, 15, 20, 25, 30, \ldots$
 - (A) Arithmetic
 - (B) Geometric
- **68.** What is the value of this expression?
 - $2+3\!\times\!4+\!1$
 - (A) 25
 - (B) 20
 - (C) 21
 - (D) 15
 - (E) 24

69. Which of the following is the first operation that should be performed in evaluating the expression?

 $7-2(3+5\times 2)^2$

- (A) Multiplying 5 by 2
- (B) Adding 3 and 5
- (C) Subtracting 2 from 7
- (D) Squaring 2
- (E) Multiplying 2 by 3
- **70.** Which of the following is the value of this expression?
 - $(3 \times 8 + 2^2 4 \times 6) \times (-1) + 1$
 - (A) 11
 - (B) -143
 - (C) 5
 - (D) 0
 - (E) -3
- **71.** What is the value of this expression?

$$-5 \times 4 \div 2 + 1 + (-3) - 24 \div 4 \times 3$$

- (A) –14
- (B) 12
- (C) -30
- (D) 1
- (E) -3

72. What is the value of this expression?

$\frac{3}{9}$	$\frac{2-1+3}{(6\times2-5)}$
(A)	2
(B)	4
(C)	$\frac{3}{4}$
(D)	8
(E)	$\frac{8}{27}$

- **73.** What number results from a correct evaluation of this expression?
- $4(8-(2\times4-7)^{3}-5)^{2}+5$ (A) 16 (B) 13 (C) 3 (D) 26 (E) 21 **74.** What is the value of this expression? $15\div3+2\times5$ (A) 15 (B) $\frac{3}{5}$ (C) 12.5 (D) $\frac{15}{13}$ (E) 3
- **75.** Evaluate this expression.
 - $\frac{2}{3} + \frac{3}{4} (10 \times 3 + 10)$ (A) $\frac{170}{3}$ (B) $\frac{9}{2}$ (C) $30\frac{2}{3}$ (D) $\frac{70}{12}$ (E) $5\frac{1}{2}$
- **76.** Evaluate this expression.
 - $\frac{1}{2} + \frac{5}{8} \times \frac{2}{5}$ (A) $\frac{9}{20}$ (B) $\frac{3}{4}$ (C) $\frac{2}{3}$ (D) $\frac{6}{25}$ (E) $\frac{1}{3}$

- **77.** What is the value of this expression?
 - $3 + 4 5 \times 6 \div 3 2 + 4 \div 2 7$
 - (A) -5
 - (B) 4
 - (C) -12
 - (D) -10
 - (E) 7
- **78.** At a school, 110 of the students are boys and 122 of the students are girls. What percent, rounded to the nearest hun-dredth, of the students are girls?
 - (A) 92.423%
 - (B) 52.59%
 - (C) 90.16%
 - (D) 190.16%
 - (E) 52.586%
- **79.** The number of records in Joe's record collection went from 400 to 408. By what percent did Joe's record collection increase?
 - (A) 16%
 - (B) 8%
 - (C) 5%
 - (D) 4%
 - (E) 2%
- **80.** The number of cookies in a box went from 40 to 30. Which of the following accurately describes the change in the number of cookies in the box?
 - (A) 1.33% increase
 - (B) 0.25% increase
 - (C) 25% decrease
 - (D) 0.25% decrease
 - (E) 2.5% increase

- **81.** If $\frac{2}{5}$ of the flowers in a garden are daisies, what percent of the flowers in the garden are daisies?
 - (A) 40%
 - (B) 4%
 - (C) 2%
 - (D) 20%
 - (E) 50%
- **82.** At a police department, 14% of the officers are rookies. What is the ratio, in simplest form, of officers who are rookies to the total number of officers?
 - (A) $\frac{7}{50}$
 - (B) $\frac{50}{7}$
 - 49
 - (C) $\frac{43}{50}$
 - (D) $\frac{50}{43}$
 - (E) $\frac{1}{6}$
- **83.** Sebastian ran 42 miles in a week. The next week, he ran 48 miles. Which of the following accurately represents the ratio of the number of miles Sebastian ran the first week to the number of miles he ran the second week?
 - (A) $\frac{7}{8}$
 - (B) $\frac{8}{7}$
 - (C) $\frac{1}{6}$
 - 6
 - (D) $\frac{1}{8}$
 - (E) $\frac{3}{4}$

- **84.** Two U.S. states are not on the country's mainland. The U.S. has a total of 50 states. What is the ratio of U.S. states NOT on its mainland to U.S. states that are on the country's mainland?
 - (A) $\frac{1}{25}$
 - (B) $\frac{1}{50}$
 - (C) $\frac{2}{25}$
 - (D) $\frac{1}{24}$
 - (E) $\frac{1}{48}$
- **85.** Luca is 12 years old, and Dave is 66 years old. What is the ratio of Dave's age to Luca's age, in simplest form?
 - (A) $\frac{66}{12}$
 - (B) $\frac{11}{2}$
 - (C) $\frac{12}{66}$
 - (D) $\frac{2}{11}$
 - ·- / 11
 - (E) $\frac{54}{1}$
- **86.** In a game of golf, Johnny scored 78. The next day, Johnny played another game of golf and scored 72. What is the ratio of Johnny's golf score on the first day to his score on the second day, in simplest form?
 - (A) $\frac{13}{12}$
 - (B) $\frac{12}{13}$
 - 13
 - (C) $\frac{78}{72}$
 - (D) $\frac{72}{78}$
 - (E) $\frac{13}{78}$

- **87.** Trace's video collection includes 132 comedy videos and 144 drama videos. What is the ratio of comedy videos to drama videos in the collection?
 - (A) $\frac{12}{11}$
 - (B) $\frac{132}{144}$
 - (C) $\frac{11}{12}$
 - (D) $\frac{144}{132}$
 - (5)
 - (E) $\frac{1}{11}$
- **88.** In a classroom, 8 of the 30 students are football players. In another classroom, 3 of the 10 students are football players. What is the sum of the ratios of football players to students who do not play football for the two classrooms?
 - (A) $\frac{8}{30}$
 - (B) $\frac{4}{15}$
 - (C) $\frac{3}{10}$
 - (D) $\frac{13}{30}$
 - (E) $\frac{61}{77}$
- **89.** The ratio of cashews to other nuts in Jar 1 is $\frac{1}{5}$. The ratio of cashews to other nuts in Jar 2 is $\frac{1}{3}$. How much greater is the ratio of cashews to other nuts in Jar 2 than the ratio of cashews to other nuts in Jar 1?
 - (A) $\frac{5}{15}$ (B) $\frac{2}{15}$ (C) $\frac{3}{15}$ (D) $\frac{1}{5}$ (E) $\frac{1}{3}$

- **90.** In a town with a population of 2,400, 41% of the residents drive trucks. How many of the residents drive trucks?
 - (A) 1,124
 - (B) 984
 - (C) 1,492
 - (D) 432
 - (E) 587
- **91.** On a track team, 11 of the 22 members are honor roll students. What percent of the members of the track team are honor roll students?
 - (A) 200%
 - (B) 50%
 - (C) 25%
 - (D) 75%
 - (E) 2%
- **92.** What number results from tripling the sum of 4 and 7?
 - (A) 11
 - (B) 3
 - (C) 22
 - (D) 19
 - (E) 33
- **93.** If 17 is decreased by 8 and the difference is multiplied by 2 more than itself, what is the result?
 - (A) 72
 - (B) 11
 - (C) 20
 - (D) 99
 - (E) 20

94. A group of 400 people went camping for a weekend. On Saturday, each camper engaged in one of the activities listed in the table. The table shows the percentages of campers who engaged in each activity. According to the table, which of the following statements is true?

ACTIVITY	PERCENT
Canoeing	34%
Hiking	21%
Rock Climbing	38%
Birdwatching	17%

- (A) Sixty-eight campers went canoeing.
- (B) Twice as many campers went birdwatching as the number that went canoeing.
- (C) Eighty-two campers went hiking.
- (D) Sixteen more campers went rock climbing than canoeing.
- (E) Twenty-one more campers went rock climbing than birdwatching.
- **95.** The table shows the percentages of political party affiliation at a college for eccentric students. The number of students attending the college is 2,850. How many more students are in a political party NOT listed in the table than students in a political party that is listed in the table?

POLITICAL PARTY MEMBERSHIP	PERCENT
People's Party of Utopia	22%
Anarchist Party of Not Voting	16%
Party of Free Market Communism	8%
Other	54%
(A) Q	
(A) 8	
(B) 1,539	
(C) 627	
(D) 228	
(E) 1,311	

- 96. An island had a population of 824 penguins. One-fourth of the island's penguin population moved to another island. The remaining population increased by $\frac{1}{2}$ and has remained the same since then. How many penguins are now on the island?
 - (A) 927
 - (B) 824
 - (C) 618
 - (D) 206
 - (E) 309
- **97.** A bakery had 42 rolls on a shelf. A customer bought $\frac{4}{7}$ of the rolls on the shelf. How many rolls did the customer buy?
 - (A) 42
 - (B) 7
 - (C) 16
 - (D) 24
 - (E) 32
- **98.** Karen read $\frac{5}{9}$ of the pages in a book the day she bought it. The next day, she read another $\frac{1}{5}$ of the book. What portion of the book had Karen read by the end of the day after she bought it?
 - (A) $\frac{25}{45}$
 - (B) $\frac{34}{45}$

 - (C) $\frac{9}{45}$
 - (D) $\frac{5}{45}$
 - (E) $\frac{5}{9}$

- **99.** A soccer team has a uniform design with 5 stripes on the shirt. Each stripe has 4 stars. The team has 34 members. If every member of the team stands in the same room, how many uniform stars are in the room?
 - (A) 43
 - (B) 680
 - (C) 54
 - (D) 720
 - (E) 870
- **100.** In an organization, $\frac{2}{9}$ of the members are from Texas. Three-sevenths of those members are women. Of those women, $\frac{5}{8}$ ride a bus to work. What portion of the members of the organization are women from Texas who ride a bus to work?
 - (A) $\frac{5}{54}$
 - (B) $\frac{191}{504}$
 - (C) $\frac{13}{54}$
 - (D) $\frac{12}{95}$
 - (E) $\frac{5}{84}$
- **101.** The number of customers in a grocery store at 4:15 p.m. was 37. An hour later, the number of customers was 5 times as many. At the decoration store across the street, the number of customers in the store at 4:15 p.m. on the same day was 12. An hour later, the number of customers in the decoration store was $3\frac{1}{2}$ times

as many. At 5:15 p.m. on that day, what was the sum of the number of customers in the grocery store and the decoration

- (A) 185
- (B) 42

store?

- (C) 188
- (D) 240
- (E) 227