

SIMULATION EXAM 4 (75 QUESTIONS)

SESSION A: READING — NARRATIVE TEXT

Read the following narrative passage carefully. Then answer Questions 1 through 12.

"The Open Window"

Every afternoon, as Camila walked home from school, music drifted from the third-floor window of the brick apartment building on Fenton Street. It was always piano music — sometimes slow and sad, sometimes quick and joyful — and Camila had taken to slowing her steps as she passed, just to hear a little more.

She had never seen who played. The window was always open in good weather, but the angle was too steep to see inside.

"It's probably a recording," her brother Jasper said one day when she mentioned it at dinner.

"It's not a recording," Camila said. "It stops and starts. Sometimes the same part is played over and over."

Jasper shrugged. He was fourteen and did not slow down for music.

The next afternoon, when Camila reached the brick building, she saw an old woman sweeping the front steps with a stiff straw broom. The woman had silver hair pinned in a loose bun, and she wore slippers despite being outside.

Camila stopped. "Excuse me," she said. "Do you live in this building?"

The woman looked up. Her eyes were a bright, surprising blue.

"For forty-six years," she said.

"Do you know who plays the piano on the third floor?"

The woman smiled. "I do," she said. "It's me."

Camila felt herself flush. "I love it. I listen every day."

"Do you play?"

"No. We don't have a piano."

The woman considered her for a long moment. Then she said, "Would you like to come up sometime? I could show you a few things. No charge."

Camila looked at the building, at the woman, at the broom in the woman's hand. "I'd have to ask my mother."

"Of course you would. I'm Mrs. Beaumont. Apartment 3B."

Two weeks later, after a long phone call between Camila's mother and Mrs. Beaumont, Camila climbed the narrow stairs to apartment 3B for the first time. Inside, the apartment was small and quiet, with a single upright piano standing against the wall. Sheet music sat in neat stacks on top.

Mrs. Beaumont showed her how to sit at the bench. She showed her where middle C was. She put Camila's right thumb on the key and asked her to press it down.

The note rang out — clear, simple, perfect. Camila felt something in her chest open like a flower.

She would walk home down Fenton Street for many years after that afternoon. Some days she walked alone. Some days she walked with friends. But every time she passed the brick building, no matter who she was with, she looked up to the third-floor window and listened — first to Mrs. Beaumont's playing, and later, when she was older, to nothing but the memory of it.

1. What is the **FIRST** thing Camila notices about the music coming from the third-floor window?

- A. It is loud enough to drown out other street sounds
- B. It changes from happy songs to sad songs over time
- C. It drifts down to her each afternoon as she walks home
- D. It seems to be played by several different people

2. Why does Camila slow her steps as she walks past the brick building?

- A. She is feeling tired from her walk home that day
- B. She wants to hear more of the piano music coming from the window
- C. She is searching for her older brother Jasper on the sidewalk
- D. She is reading a long message on her mobile phone screen

3. Why does Jasper say the music is "probably a recording"?

- A. He has seen the speakers from the street through the window
- B. He recognizes the music from a famous concert he attended
- C. He has heard the same kind of music played in shopping malls
- D. He is not interested in slowing down to listen carefully

4. What does Camila notice FIRST about Mrs. Beaumont when she sees her on the front steps?

- A. She is sweeping the steps with a stiff straw broom
- B. She is holding a thick piece of sheet music in her hand
- C. She is wearing a long red coat with matching leather gloves
- D. She is calling loudly to a neighbour across the busy street

5. What does Mrs. Beaumont say about how long she has lived in the building?

- A. Only a few months because she just moved in last year
- B. Forty-six years
- C. Since she was a young child many years before this
- D. She would rather not give an exact number of years

6. Why does Camila say "I'd have to ask my mother" when Mrs. Beaumont invites her upstairs?

- A. She does not actually want to take any kind of lesson
- B. She is afraid that Mrs. Beaumont might be a dangerous person
- C. She knows she needs permission from a parent before agreeing
- D. She wants her mother to come along with her to the apartment

7. What happens BEFORE Camila first visits Mrs. Beaumont's apartment?

- A. Her mother has a long phone call with Mrs. Beaumont
- B. Camila signs up for piano lessons offered at her school
- C. Mrs. Beaumont visits Camila and her family at their home
- D. Jasper agrees to come along with Camila to the first lesson

8. What does Mrs. Beaumont teach Camila during the FIRST lesson?

- A. How to read complete sheets of difficult music quickly
- B. How to choose a piano of her own that she should purchase
- C. How to play several entire songs from memory without pausing
- D. How to sit at the bench and find middle C on the keyboard

9. The narrator describes Camila as feeling "something in her chest open like a flower." What does this phrase MOST LIKELY mean?

- A. Camila is experiencing a sudden physical illness in her chest
- B. Camila is feeling guilty about pressing the piano key
- C. Camila is feeling a powerful new sense of wonder and joy
- D. Camila is becoming very sleepy and relaxed at the piano

10. Why does Camila continue to look up at the third-floor window even years later?

- A. She is hoping to see Mrs. Beaumont's grandchildren playing inside
- B. She is remembering what the music and the lessons meant to her
- C. She is checking that the window is still open in the warm weather
- D. She is comparing the building to other apartments she has visited

11. Which sentence BEST states a theme of the passage?

- A. A small act of curiosity can lead to a meaningful new path in life
- B. Older people are usually too busy to notice young children passing by
- C. Music is the only art form that can truly change a person's feelings
- D. Friendship between strangers is impossible without family approval

SESSION B: READING — INFORMATIONAL TEXT

Read the following informational passage carefully. Then answer Questions 13 through 18.

"The Discovery That Saved Millions"

Until just over a hundred years ago, a diagnosis of diabetes was almost always a death sentence. The disease, which prevents the body from properly managing sugar in the blood, killed thousands of children and adults every year. Doctors knew that something was wrong with a substance called insulin, made by the pancreas — but no one had been able to extract it in a form that could help patients.

In 1921, two researchers in Toronto, Canada, set out to change that. Their names were Frederick Banting and Charles Best. Banting was a young doctor with an idea. Best was a medical student who had been hired to help with the experiments. Together, working in a small laboratory at the University of Toronto, they began testing a way to extract insulin from the pancreas of dogs.

The work was difficult and discouraging. The early experiments produced impure substances that often made the test animals sick. But Banting and Best refused to stop. A senior scientist named James Collip joined the team and helped purify the insulin until it was safe for human use.

In January 1922, a fourteen-year-old boy named Leonard Thompson became the first person in history to receive an injection of insulin. He had been close to death from diabetes. Within days of treatment, his condition improved dramatically. He lived another thirteen years — years he would not have had without insulin.

Word of the discovery spread quickly. Within a few years, insulin was being manufactured around the world. Banting and a fellow researcher named John Macleod were awarded the Nobel Prize for the discovery in 1923. Banting later shared his prize money with Best, who had not been included in the award.

Today, insulin is used by tens of millions of people every day. Children who would once have died young now grow into adults, attend university, raise families, and live full lives. The work that began in a small Toronto laboratory in 1921 quietly changed the world.

13. Which sentence BEST states the main idea of the passage?

- A. James Collip was the most important scientist on the insulin research team
- B. The discovery of insulin in 1921 transformed diabetes from a deadly disease into a manageable one
- C. The Nobel Prize is awarded each year to scientists who have helped save many lives
- D. Leonard Thompson lived a much longer life than any other diabetes patient in his time

14. Where did the research that led to the discovery of insulin take place?

- A. At a private clinic in northern Quebec just outside Montreal
- B. In a city hospital located somewhere in the United States
- C. At a small children's hospital in central England near London
- D. In a small laboratory at the University of Toronto in Canada

15. According to the passage, what was the BIGGEST early challenge faced by Banting and Best?

- A. The substances they extracted were impure and often made the test animals sick
- B. They could not find any volunteers who were willing to test the medicine on themselves
- C. The University of Toronto refused to provide them with any laboratory equipment
- D. They had never met before and they did not get along well with each other at first

16. What does the word "extract" mean as it is used in the passage?

- A. To remove something accidentally from a sealed container

D. The tall building on the corner of Main Street

20. Which sentence uses "its" or "it's" CORRECTLY?

A. The cat licked it's paws after eating dinner quickly

B. Its' going to rain heavily again later tonight

C. The dog wagged its tail when it saw the visitors

D. Their car has lost it's headlights again somehow

21. Which sentence shows correct SUBJECT–VERB agreement?

A. The list of names were posted on the bulletin board

B. The list of names was posted on the bulletin board

C. The lists of names was posted on the bulletin board

D. The list of names is being post on the bulletin board

22. Which sentence uses commas CORRECTLY?

A. Before the game started the coach gave a long speech

B. Before the game, started the coach gave a long speech

C. Before, the game started the coach gave a long speech

D. Before the game started, the coach gave a long speech

23. Which sentence uses capitalization CORRECTLY?

A. My family visited Yellowstone national park last July

B. My family visited yellowstone National Park last July

C. My family visited Yellowstone National Park last July

D. my family visited yellowstone national park last July

24. Which sentence uses quotation marks CORRECTLY to show what someone said?

A. Maria said that, "she was excited about the trip."

B. "Maria said that she was excited about the trip."

C. "I am excited about the trip," Maria said happily.

D. Maria said happily I am excited about the trip.

25. Which sentence uses PRONOUNS correctly?

A. Between you and I, the answer to the question is obvious

B. The teacher gave the prize for best effort to my brother and I

C. The package finally arrived for she and her new husband

D. The waiter brought dessert to my sister and me

26. Which sentence is an INTERROGATIVE sentence?

A. The library closes at eight on weekends each season

B. Please return the books before midnight tomorrow night

C. Have you finished your homework yet this evening?

D. What an interesting story she told the class today!

27. Which sentence uses the verb tense CORRECTLY?

A. By tomorrow, we will have finished the entire project

B. By tomorrow, we will finished the entire project completely

C. By tomorrow, we have finished the entire project entirely

D. By tomorrow, we finished the entire project successfully

28. Which sentence is a COMPOUND sentence?

- A. Maria walked home from the library carrying her books
- B. After dinner that evening, Maria walked home from the library
- C. The book that Maria borrowed from the library was overdue
- D. Maria walked home from the library, and her sister joined her

29. In the sentence below, which word is an ADJECTIVE?

The brave firefighter quickly entered the burning building.

- A. quickly
- B. firefighter
- C. brave
- D. entered

30. Which sentence is written MOST CLEARLY without a misplaced modifier?

- A. Wagging its tail, the boy patted the friendly little dog
- B. The boy patted the friendly dog, which was wagging its tail
- C. The boy patted the friendly dog wagging its tail with joy
- D. With a wagging tail, the boy patted the friendly little dog

31. Open-Response — Writing Prompt.

Think about a person who has had a positive impact on your life. Write a piece in which you describe this person and explain how he or she has influenced you.

SESSION D: MATHEMATICS — STAGE 1

Answer Questions 32 through 50 by selecting the best answer.

32. What is $5,037 - 1,549$?

- A. 3,488
- B. 3,498
- C. 4,488
- D. 4,512

33. What is 0.5×0.4 ?

- A. 0.9
- B. 0.5
- C. 0.2
- D. 2.0

34. What is the value of the digit 7 in the number 0.0357?

- A. 7 thousandths
- B. 7 ten-thousandths

- C. 7 hundredths
- D. 7 tenths

35. Which mixed number is EQUIVALENT to the improper fraction $17/5$?

- A. 2 and $1/5$
- B. 3 and $1/5$
- C. 3 and $3/5$
- D. 3 and $2/5$

36. What is 20% of 150?

- A. 30
- B. 15
- C. 50
- D. 75

37. Sara ate $1/4$ of a pizza and her brother ate $3/8$ of the same pizza. What FRACTION of the pizza did they eat in total?

- A. $4/12$
- B. $5/8$
- C. $1/3$
- D. $4/8$

38. A box of granola bars contains 12 bars. Tomas buys 4 boxes and shares all the bars equally among 8 friends. How many bars does each friend receive?

- A. 8 bars

- B. 4 bars
- C. 12 bars
- D. 6 bars

39. A recipe uses 2 cups of flour for every 3 cups of sugar. If the cook uses 8 cups of flour, how many cups of sugar are needed?

- A. 6 cups
- B. 9 cups
- C. 12 cups
- D. 18 cups

40. Which of the following is EQUIVALENT to 0.6?

- A. 60%
- B. 6%
- C. 0.06
- D. $\frac{1}{6}$

41. What is the value of the expression $5y - 8$ when $y = 4$?

- A. 7
- B. 12
- C. 17
- D. 20

42. Solve for x : $x \div 4 = 9$

- A. 13

- B. 5
- C. 9
- D. 36

43. Look at this pattern: 100, 90, 80, 70, 60, ... Which rule BEST describes the pattern?

- A. Multiply each term by 0.9 to get the next term
- B. Add 10 to the previous term each time
- C. Subtract 10 from the previous term each time
- D. Divide each term by 1.1 to get the next term

44. Simplify the expression: $4(x + 3)$

- A. $4x + 12$
- B. $4x + 3$
- C. $x + 12$
- D. $7x$

45. Look at the pseudocode below.

SET total = 1

FOR each number from 1 to 4: Multiply total by the number

Display total

What value will be displayed?

- A. 4
- B. 10

C. 16

D. 24

46. A student earned the following scores on five tests: 75, 82, 90, 78, and 85. What is the MEAN of these scores?

A. 80

B. 82

C. 85

D. 90

47. What is the mode of these numbers: 4, 7, 9, 7, 12, 4, 7, 15?

A. 4

B. 9

C. 7

D. 12

48. A spinner has 5 equal sections labelled 1, 2, 3, 4, and 5. What is the probability of spinning a number GREATER than 3?

A. $\frac{2}{5}$

B. $\frac{3}{5}$

C. $\frac{1}{5}$

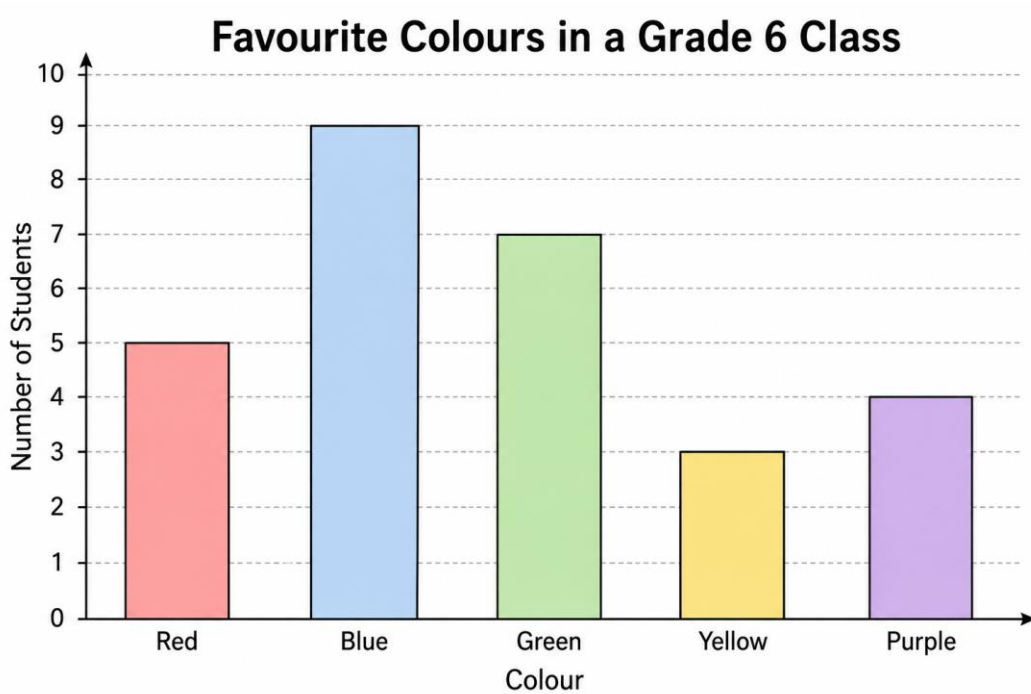
D. $\frac{1}{2}$

49. What is the MEDIAN of these eight numbers: 3, 8, 12, 15, 20, 22, 25, 30?

A. 12

- B. 15
- C. 22
- D. 17.5

50. The bar graph below shows the favourite colours of students in a Grade 6 class. How many MORE students chose blue than chose yellow?



- A. 4
- B. 6
- C. 9
- D. 12

SESSION D: MATHEMATICS — STAGE 2

Answer Questions 51 through 75 by selecting the best answer.

51. Round the number 6,478 to the nearest thousand.

- A. 6,000
- B. 6,500
- C. 7,000
- D. 6,400

52. What is the greatest common factor (GCF) of 24 and 36?

- A. 6
- B. 24
- C. 12
- D. 72

53. Solve for n: $3n - 5 = 16$

- A. 5
- B. 11
- C. 16
- D. 7

54. A bookstore sold 32 fiction books and 27 non-fiction books on Monday. On Tuesday, the store sold HALF as many fiction books as on Monday and the SAME number of non-fiction books. What is the TOTAL number of books sold over the two days?

- A. 86 books
- B. 102 books
- C. 118 books
- D. 134 books

55. A rectangular swimming pool is 15 metres long and 8 metres wide. What is the AREA of the pool?

- A. 23 m^2
- B. 46 m^2
- C. 60 m^2
- D. 120 m^2

SESSION D: MATHEMATICS — STAGE 3

56. A cube has a side length of 5 cm. What is its VOLUME?

- A. 125 cm^3
- B. 15 cm^3
- C. 25 cm^3
- D. 30 cm^3

57. A triangle has vertices at A(2, 3), B(4, 5), and C(6, 1). The triangle is translated 3 units to the LEFT and 2 units DOWN. What are the new coordinates of vertex A'?

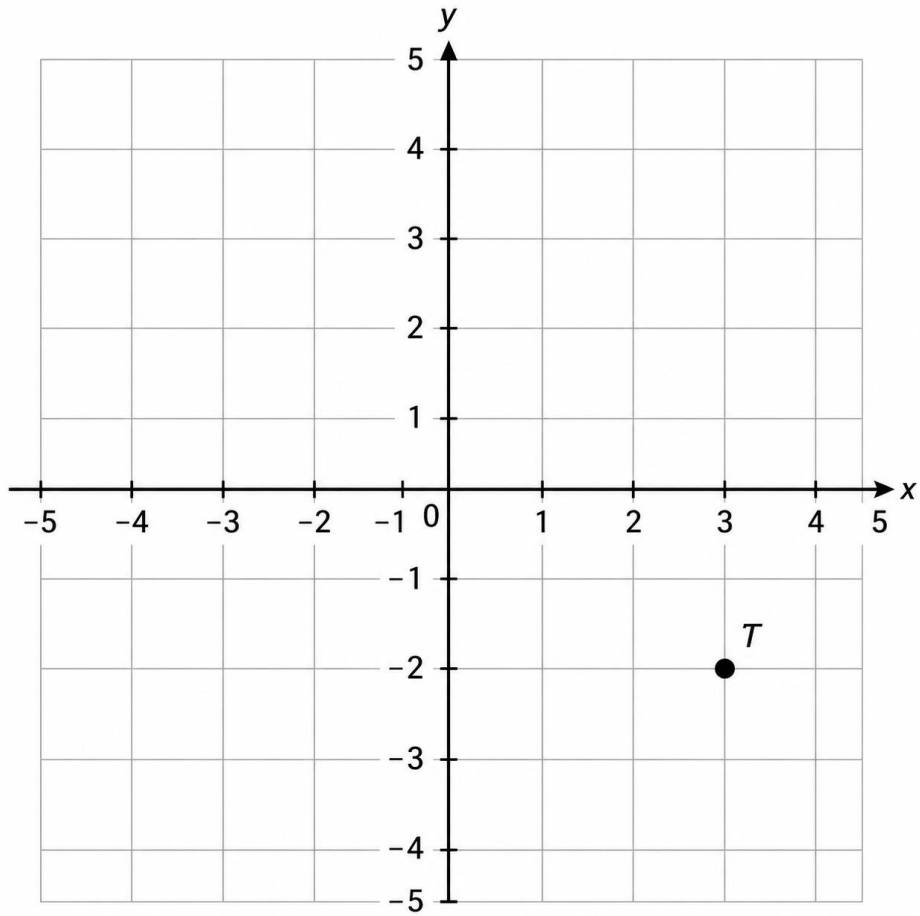
- A. (5, 5)
- B. (-1, 5)
- C. (-1, 1)
- D. (5, 1)

58. Two angles are COMPLEMENTARY. If one angle measures 28° , what is the measure of the OTHER angle?

- A. 152°

- B. 62°
- C. 90°
- D. 28°

59. On the coordinate plane below, what are the coordinates of point T?



- A. (3, -2)
- B. (-2, 3)
- C. (-3, 2)
- D. (2, -3)

60. How many centimetres are there in 3.5 metres?

- A. 35 cm
- B. 0.035 cm
- C. 3,500 cm
- D. 350 cm

61. Which polygon has EXACTLY five sides?

- A. Hexagon
- B. Pentagon
- C. Quadrilateral
- D. Octagon

62. In an equilateral triangle, what is the measure of EACH interior angle?

- A. 45°
- B. 90°
- C. 60°
- D. 120°

63. A triangle has a base of 10 cm and a height of 6 cm. What is its AREA?

- A. 30 cm^2
- B. 60 cm^2
- C. 16 cm^2
- D. 80 cm^2

64. The table below shows the relationship between the number of hours worked and the amount earned. Which equation BEST represents this relationship?

Hours (h)	Earnings (E)
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1	\$12
2	\$24
3	\$36
4	\$48

A. $E = h + 11$

B. $E = h + 12$

C. $E = h \times 11$

D. $E = h \times 12$

65. A jacket originally costs \$80. It is on sale for 25% off. What is the SALE price of the jacket?

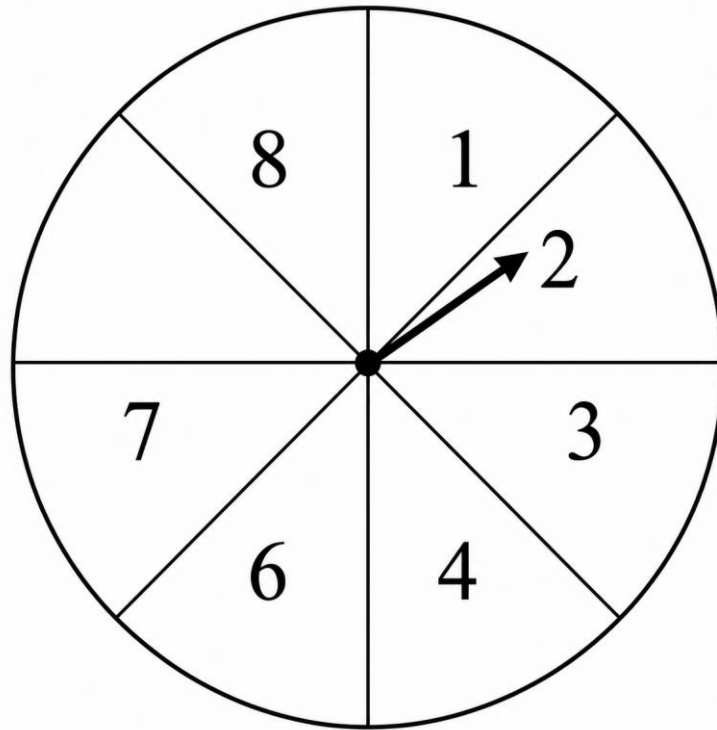
A. \$20

B. \$60

C. \$55

D. \$75

66. The spinner shown below has 8 equal sections numbered 1 through 8. What is the probability of spinning a number that is GREATER than 5?



- A. $\frac{3}{8}$
- B. $\frac{5}{8}$
- C. $\frac{1}{2}$
- D. $\frac{1}{8}$

67. In a class of 25 students, 15 said that pizza was their favourite food. What PERCENT of students chose pizza?

- A. 15%
- B. 25%
- C. 40%
- D. 60%

68. Look at the pseudocode below.

SET $x = 10$

WHILE $x > 4$: Subtract 2 from x

Display x

What value will be displayed?

A. 6

B. 2

C. 4

D. 8

69. Simplify the expression: $7a + 3b - 2a + 5b$

A. $7a + 8b$

B. $5a + 8b$

C. $9a + 8b$

D. $5a + 2b$

70. What is $12.6 - 4.85$?

A. 7.75

B. 8.25

C. 8.75

D. 8.15

SESSION D: MATHEMATICS — STAGE 4

71. Aiden deposits \$400 into a savings account that pays 3% simple interest each year. How much interest will he earn after 5 years?

- A. \$12
- B. \$20
- C. \$40
- D. \$60

72. Sara wants to save \$240 over 8 months. If she saves the same amount each month, how much will she need to save each month?

- A. \$20 per month
- B. \$25 per month
- C. \$30 per month
- D. \$40 per month

73. Which of the following is an **ADVANTAGE** of using cash to make a purchase?

- A. It can be used to buy items quickly on most websites
- B. It cannot lead to interest charges or debt over time
- C. It helps a person build a strong credit history over time
- D. It can be replaced very quickly if it is lost or stolen

74. Which of the following **BEST** describes **LENDING**?

- A. Giving someone the use of money or an item with the agreement that it will be returned later
- B. Exchanging one item or service for another item or service of approximately equal value

C. Giving away money or resources to a person or organization without expecting anything in return

D. Storing money in a bank account so that it can earn interest steadily over time

75. A drawer contains 7 black socks, 5 white socks, and 4 grey socks. Without looking, Marcus pulls out one sock at random. What is the probability that the sock is WHITE?

A. $5/7$

B. $4/16$

C. $7/16$

D. $5/16$

ANSWER KEY & DETAILED EXPLANATIONS — SIMULATION EXAM 4

1. C — The opening sentence states this directly: "Every afternoon, as Camila walked home from school, music drifted from the third-floor window..." The daily timing and the drifting of sound from the window match option C precisely.

2. B — The narrator states explicitly: "Camila had taken to slowing her steps as she passed, just to hear a little more." Slowing down to extend her listening time is the cause-and-effect link the passage gives.

3. D — The text notes that Jasper "shrugged. He was fourteen and did not slow down for music." His dismissive guess reflects disinterest rather than evidence, making D the only option grounded in the passage.

4. A — The passage states that Camila "saw an old woman sweeping the front steps with a stiff straw broom." This is the first detail of Mrs. Beaumont introduced before any conversation begins.

5. B — Mrs. Beaumont answers directly: "For forty-six years," she said. This is a recall question whose answer appears verbatim in the dialogue.

6. C — Camila is eager to learn (she has been listening for weeks), but she pauses to confirm with her mother first, showing she understands the rule about parental permission. The story confirms this when "a long phone call between Camila's mother and Mrs. Beaumont" precedes the visit.

7. A — The passage states: "Two weeks later, after a long phone call between Camila's mother and Mrs. Beaumont, Camila climbed the narrow stairs to apartment 3B for the first time." The phone call between the adults is the explicit precursor event.

8. D — The first lesson is described as: "Mrs. Beaumont showed her how to sit at the bench. She showed her where middle C was. She put Camila's right thumb on the key and asked her to press it down." These foundational actions match option D exactly.

9. C — The figurative comparison of an opening flower in the chest expresses a sudden, beautiful internal experience. In context — Camila pressing her first piano note — this signals wonder and joy, not illness, guilt, or sleepiness.

10. B — The closing paragraph explains that for years afterward, Camila "looked up to the third-floor window and listened — first to Mrs. Beaumont's playing, and later, when she was older, to nothing but the memory of it." Her continued glance is an act of memory.

11. A — The story traces a path from a small moment (slowing to listen) through a brief conversation to a lasting transformation (a lifetime of music). This arc fits the theme that curiosity can open a meaningful new direction in life.

12. OPEN-RESPONSE — A strong Code 40 response identifies the specific change: at first the brick building is just a place Camila walks past, but after meeting Mrs. Beaumont and taking lessons it becomes a place of meaning that she returns to in memory even years later. Code 40 responses cite the early "drifting music" detail, the moment she enters apartment 3B, and the ending where she keeps looking up at the window.

13. B — The passage opens by stating that diabetes was once "almost always a death sentence" and closes by describing how millions of people now live full lives because of insulin. The transformation of a deadly disease into a manageable one is the central message option B captures.

14. D — The passage states explicitly that the research happened "in a small laboratory at the University of Toronto." This is a direct-recall fact appearing in the second paragraph.

15. A — The third paragraph reports: "The early experiments produced impure substances that often made the test animals sick." Impurity in the extracted material was the key obstacle until James Collip helped purify it.

16. C — Banting and Best aimed to "extract insulin from the pancreas of dogs," meaning to draw out a useful substance from a biological source. Option C captures this meaning of taking or pulling something useful out of a larger source.

17. B — The passage states: "Within days of treatment, his condition improved dramatically. He lived another thirteen years — years he would not have had without insulin." This recall question is answered directly in the fourth paragraph.

18. OPEN-RESPONSE — A strong Code 40 response identifies that the discovery saved millions because before insulin, thousands died from diabetes every year, and afterward "tens of millions of people every day" use insulin and live full lives. Code 40 responses cite specific evidence: the death-sentence statement, Leonard Thompson's recovery, and the closing statement about children growing into adults.

19. A — A complete sentence requires both a subject and a finite verb expressing a complete thought. "The wind howled" has both, while B, C, and D are fragments — participial phrase, dependent clause, and noun phrase respectively.

20. C — "Its" without an apostrophe is the possessive form, used when something belongs to an animal or thing. "Its tail" belongs to the dog and takes the possessive "its"; the contraction "it's" means "it is" and does not fit any of the other contexts.

21. B — The subject "list" is singular, so it requires the singular verb "was." The prepositional phrase "of names" does not change the subject's number, and the other options pair singular subjects with plural verbs or use the wrong verb form.

22. D — An introductory dependent clause ("Before the game started") is followed by a comma before the main clause begins. Option D places that comma correctly; the other options omit it or put it in the wrong location.

23. C — Proper nouns like "Yellowstone National Park" are capitalized in full because the entire phrase names a specific place. Option C applies this rule, while the others either lose the proper-noun capitals or capitalize inconsistently.

24. C — Direct quotations are enclosed in quotation marks, with the comma placed inside the closing quote before the dialogue tag begins. Option C follows this rule, while the others misuse quotes around indirect speech, place quotes around the whole sentence, or omit quotation marks entirely.

25. D — When a pronoun is the object of a preposition, the objective form ("me") is required, not the subjective form ("I"). "To my sister and me" uses the correct objective pronoun; the other options use subjective forms after prepositions, which is incorrect.

26. C — An interrogative sentence asks a question and ends with a question mark. "Have you finished your homework yet?" is the only option that meets both conditions; A is declarative, B is imperative, and D is exclamatory.

27. A — "By tomorrow" pairs with the future perfect tense "will have finished," used for an action that will be completed before a specified future time. The other options pair this future time marker with incorrect tense constructions.

28. D — A compound sentence joins two independent clauses, often with a comma and a coordinating conjunction. "Maria walked home from the library, and her sister joined her" follows this structure; A and B are simple sentences, and C is complex.

29. C — An adjective modifies a noun. "Brave" describes the noun "firefighter," making it an adjective; "quickly" is an adverb, "firefighter" is a noun, and "entered" is a verb.

30. B — A misplaced modifier creates an unintended meaning by sitting next to the wrong noun. Option A unintentionally suggests the boy is wagging the tail, while option B clearly attributes the wagging tail to the dog through the relative clause "which was wagging its tail."

31. OPEN-RESPONSE — A strong Code 30 or 40 response focuses on one specific person, describes them with concrete detail, and explains the impact through examples or moments rather than vague statements. The strongest responses move beyond "they are nice" to show what makes the person influential through stories, advice received, or behaviour modelled.

32. A — Subtract by stacking the values and borrowing where needed: $5,037 - 1,549 = 3,488$. Estimating first ($5,000 - 1,500 = 3,500$) confirms the answer is reasonable.

33. C — Multiply 0.5×0.4 by first ignoring the decimal: $5 \times 4 = 20$. The two factors together have two decimal places, so the result is 0.20, which equals 0.2 in its simplest form.

34. B — In 0.0357, count the decimal places from the decimal point: 0 (tenths), 3 (hundredths), 5 (thousandths), 7 (ten-thousandths). The digit 7 sits in the fourth place after the decimal, so its value is 7 ten-thousandths.

35. D — Divide 17 by 5: the quotient is 3 with a remainder of 2. The mixed number is therefore 3 wholes plus $\frac{2}{5}$, written as 3 and $\frac{2}{5}$.

36. A — Convert 20% to its decimal form (0.20), then multiply: $0.20 \times 150 = 30$. As a check, 10% of 150 is 15, and 20% is double that, which equals 30.

37. B — Rewrite $\frac{1}{4}$ with the common denominator 8: $\frac{1}{4} = \frac{2}{8}$. Then $\frac{2}{8} + \frac{3}{8} = \frac{5}{8}$. Fractions can only be added once their denominators match.

38. D — Find the total number of bars: $4 \text{ boxes} \times 12 \text{ bars} = 48 \text{ bars}$. Divide equally among 8 friends: $48 \div 8 = 6 \text{ bars per friend}$.

39. C — The ratio of flour to sugar is 2:3. With 8 cups of flour (which is 4 times the 2-cup ratio unit), the sugar must also be 4 times the 3-cup ratio unit: $3 \times 4 = 12 \text{ cups}$.

40. A — The decimal 0.6 represents 6 tenths, which equals 60 hundredths. As a percent, 60 hundredths is 60%, since percent literally means "per hundred."

41. B — Substitute $y = 4$ into $5y - 8$: $5(4) - 8 = 20 - 8 = 12$. Order of operations requires multiplication before subtraction.

42. D — Isolate x by performing the inverse operation. Since x is being divided by 4, multiply both sides by 4: $x = 9 \times 4 = 36$.

43. C — Each term in the pattern decreases by 10 (from 100 to 90, 90 to 80, and so on). The rule "subtract 10 from the previous term" describes this decreasing pattern correctly.

44. A — The distributive property requires multiplying the outside factor by each term inside the brackets: $4(x + 3) = 4 \cdot x + 4 \cdot 3 = 4x + 12$.

45. D — Trace through the loop, multiplying the running total by each number 1 through 4: $1 \times 1 = 1$, $1 \times 2 = 2$, $2 \times 3 = 6$, $6 \times 4 = 24$. The final value displayed is 24.

46. B — Add the five values: $75 + 82 + 90 + 78 + 85 = 410$. Divide by the number of values (5): $410 \div 5 = 82$. The mean is the total divided by the count.

47. C — Count how often each value appears: 4 appears twice, 7 appears three times, and 9, 12, and 15 each appear once. The value that appears most often is 7, making it the mode.

48. A — Numbers greater than 3 on the spinner are 4 and 5 — that is 2 favourable outcomes out of 5 total. Probability = $2/5$.

49. D — With eight values already in order, the median is the average of the two middle values (positions 4 and 5): $(15 + 20) \div 2 = 17.5$. When the count is even, the median sits halfway between the two centre values.

50. B — From the bar graph, the blue bar reaches 9 and the yellow bar reaches 3. The difference is $9 - 3 = 6$ students.

51. A — To round 6,478 to the nearest thousand, look at the hundreds digit (4). Since $4 < 5$, round down, leaving the thousands digit unchanged at 6 and giving 6,000.

52. C — List the common factors of 24 and 36. The factors of 24 are 1, 2, 3, 4, 6, 8, 12, 24; the factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18, 36. The largest factor appearing on both lists is 12.

53. D — Add 5 to both sides: $3n = 21$. Divide both sides by 3: $n = 7$. Two-step equations are solved by undoing operations in reverse order.

54. B — Monday total: $32 + 27 = 59$ books. Tuesday total: 16 (half of 32) + $27 = 43$ books. Grand total: $59 + 43 = 102$ books over the two days.

55. D — Area of a rectangle = length \times width = $15 \times 8 = 120 \text{ m}^2$. The unit is squared because area always measures two-dimensional space.

56. A — Volume of a cube = side \times side \times side = $5 \times 5 \times 5 = 125 \text{ cm}^3$. The unit is cubed because volume always measures three-dimensional space.

57. C — Translating a point 3 units left subtracts 3 from the x-coordinate; translating 2 units down subtracts 2 from the y-coordinate. Applied to $A(2, 3)$: $A' = (2 - 3, 3 - 2) = (-1, 1)$.

- 58. B** — Complementary angles sum to 90° . So the unknown angle is $90^\circ - 28^\circ = 62^\circ$. This contrasts with supplementary angles, which sum to 180° .
- 59. A** — Point T sits 3 units to the right of the y-axis (so $x = 3$) and 2 units below the x-axis (so $y = -2$), giving the coordinates $(3, -2)$. Coordinates are always written in the order (x, y) .
- 60. D** — Since 1 metre equals 100 centimetres, multiply by 100 to convert: $3.5 \times 100 = 350$ cm. Converting from a larger unit to a smaller unit requires multiplication.
- 61. B** — A pentagon is defined as a polygon with exactly five sides. A hexagon has six, a quadrilateral has four, and an octagon has eight.
- 62. C** — An equilateral triangle has three equal interior angles whose sum must be 180° . Dividing 180° by 3 gives 60° for each angle.
- 63. A** — The area of a triangle is one-half base times height: $(1/2) \times 10 \times 6 = 30$ cm². The formula always halves the rectangle that would enclose the triangle.
- 64. D** — In the table, each value of E equals 12 times the value of h ($1 \times 12 = 12$, $2 \times 12 = 24$, $3 \times 12 = 36$, $4 \times 12 = 48$). The equation that captures this multiplicative relationship is $E = h \times 12$.
- 65. B** — Calculate the discount: 25% of \$80 = $0.25 \times 80 = \$20$. Subtract from the original price: $\$80 - \$20 = \$60$.
- 66. A** — Numbers greater than 5 on the spinner are 6, 7, and 8 — that is 3 favourable outcomes out of 8 total. Probability = $3/8$.
- 67. D** — Divide 15 by 25 to find the fraction: $15 \div 25 = 0.60$, which equals 60%. Converting a fraction to a percent always involves dividing and multiplying by 100.
- 68. C** — Trace the loop: x starts at 10. Each pass subtracts 2: $10 \rightarrow 8 \rightarrow 6 \rightarrow 4$. When $x = 4$, the condition " $x > 4$ " becomes false and the loop stops, so the displayed value is 4.
- 69. B** — Group like terms by variable: $(7a - 2a) + (3b + 5b) = 5a + 8b$. Only terms with the same variable can be combined.
- 70. A** — Align the decimals and subtract: $12.60 - 4.85 = 7.75$. Adding the zero placeholder in the hundredths place of 12.6 makes the subtraction straightforward.
- 71. D** — Simple interest = principal \times rate \times time = $\$400 \times 0.03 \times 5 = \60 . The simple interest formula treats the principal as constant across all years.
- 72. C** — Divide the savings goal by the time available: $\$240 \div 8 = \30 per month. Breaking a financial goal into equal periodic deposits is a basic planning step.

73. B — Cash transactions involve no borrowing, so no interest can accumulate and no debt can result. The other options are false: cash is not accepted online, does not build credit history, and is not replaceable if lost.

74. A — Lending is the act of giving someone the use of money or an item with the agreement that it will be returned later. Trading involves exchange, donating involves giving without expecting return, and saving involves storing money in a bank.

75. D — Total socks = $7 + 5 + 4 = 16$. Favourable outcomes (white socks) = 5, so probability = $5/16$. Probability is always favourable outcomes divided by total outcomes.