SIMULATION EXAM 3 (75 QUESTIONS)

SESSION A: READING — NARRATIVE TEXT

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

"The Sketchbook"

Anika first saw the sketchbook on the seat across from her on the bus. It was small, brown, and bound with a thin leather strap, and it sat alone where someone had just gotten off at the stop before hers. The bus was nearly empty.

She looked at the door of the bus, then at the sketchbook, then back at the door. She had been told a hundred times not to touch lost objects on public transit. But the sketchbook looked old, almost antique, and somehow important. She crossed the aisle and picked it up.

At her own stop, she stepped off with the sketchbook tucked under her arm. At home, she sat on her bed and opened it.

Inside were drawings — dozens of them, all done in fine pencil. Trees. Faces. A small boat tied to a dock. A pair of hands holding a teacup. The drawings were not signed, but on the inside front cover, in careful writing, were three words: Property of Theo.

There was no address, no phone number, no last name. Anika stared at the writing for a long minute.

The next morning, she brought the sketchbook to school in her backpack. At lunch, she sat with her best friend Priya at their usual table.

"Someone left this on the bus," Anika said, sliding the sketchbook across.

Priya flipped through it. "These are amazing. Whoever drew them is talented."

"His name is Theo. That's all I know."

"There must be three hundred Theos in this city."

"I know."

They were quiet for a moment. Then Priya said, "Look at this one." She turned the sketchbook to a particular page. On it was a drawing of a small storefront — a window with curved letters Anika could not quite make out, a striped awning, a bench by the door. "Doesn't that look like Maple Café?"

Anika took the book back and looked carefully. Priya was right. The drawing showed Maple Café, the small bakery on Carlton Street, with surprising accuracy — even the chip on the corner of the bench.

After school, Anika walked to Maple Café. She showed the sketchbook to the woman behind the counter. The woman looked at the cover, smiled, and called toward the back. "Theo? You won't believe what just walked in."

A boy came out wiping his hands on his apron. He looked at the sketchbook and his face shifted from confusion to recognition to something that Anika could only call relief.

"Where did you find it?" he asked.

"On the bus."

He took the sketchbook carefully, as if it were made of glass. "My grandfather made this," he said. "He passed away last spring."

Anika did not know what to say. She just nodded.

Theo looked up. "Thank you. I'd thought it was gone forever."

The walk home felt different. Anika did not know Theo. She might never see him again. But she had carried something small from one life to another, and she could feel that she had done something that mattered.

1. Where did Anika FIRST see the sketchbook?

A. On the seat across from her on the bus

B. In a drawer at home that she had never opened before

C. Tucked carefully into a stack of returned library books

D. On a wooden bench just outside Maple Café one morning

2. What does Anika decide to do with the sketchbook after picking it up on the bus?

A. Hand it directly to the bus driver before getting off

B. Place it back exactly where she found it on the seat

C. Take it home and look through it for clues about the owner

D. Donate it to a school art club the very next morning

3. Which detail BEST helps the reader know that the sketchbook is OLD?

A. It is filled with carefully written notes about wild animals

B. It is bound with a thin leather strap and looks almost antique

C. It contains many drawings of the same trees in different seasons

D. It was found on a bus that no longer follows its original route

4. What does Anika find written on the INSIDE FRONT COVER of the sketchbook?

A. The full name and home address of the original artist

B. A list of subjects the artist was planning to draw next

C. The exact date when the sketchbook was given as a gift

D. The words "Property of Theo" in careful handwriting

5. What does the word "antique" mean as it is used in the passage?

A. Damaged so badly that it cannot easily be repaired

B. Brand-new and never opened by anyone before

C. Old and possibly valuable because of its age

D. Decorated brightly with many different colours

6. How does Priya help Anika identify the owner of the sketchbook?

A. She remembers seeing the owner drawing at school once

B. She offers to ask her older brother for any helpful clues

C. She suggests they post a photo on social media to find him

D. She recognizes Maple Café in one of the pencil drawings

7. Which sentence BEST describes Theo's reaction when he first sees the sketchbook?

A. His face moves from confusion to recognition to a look of relief

B. He frowns and accuses Anika of having stolen it from his apartment

C. He laughs cheerfully and offers her a free pastry as a reward

D. He shows no emotion at all and tucks it quietly under his apron

8. Why is the sketchbook so MEANINGFUL to Theo?

A. It was a thoughtful gift from his best friend last summer

B. It was made by his grandfather, who has recently passed away

C. It contains his only drawings from a special school art class

D. It once belonged to a famous artist whose work he admires

9. Which word BEST describes Anika based on her actions in the story?

A. Greedy — she keeps the sketchbook for herself permanently

B. Forgetful — she leaves the sketchbook behind on the bus

C. Thoughtful — she takes care to return the sketchbook to its owner

D. Suspicious — she refuses to trust anyone she does not already know

10. At the end of the story, how does Anika feel as she walks home?

A. Quietly satisfied that she has done something meaningful

B. Disappointed that Theo did not invite her to become his friend

C. Angry that no one offered her any reward for returning the book

D. Worried that she will get in trouble for picking it up on the bus

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

A. Most lost items on public transit are never returned to their owners

B. Small acts of kindness can carry meaning beyond what we can see

C. Children should never pick up anything on public transportation systems

D. Bakeries are usually the best place to find lost personal belongings

12. Open-Response. Explain how Priya helps Anika in the story. Use specific details from the passage to support your answer.

(Write your response in the space provided.)

_____

_____

_____

_____

SESSION B: READING — INFORMATIONAL TEXT

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

"The Science of Echoes"

If you have ever shouted into a deep valley or stood inside a large empty room, you have probably heard your own voice come back to you a second or two later. This delayed copy of a sound is called an echo, and it is the result of sound waves bouncing off a hard surface and returning to your ears.

Sound travels through the air as invisible waves, in much the same way that ripples spread across the surface of a pond. When these waves hit something solid — a cliff, a wall, a row of buildings — they bounce off and travel back. If the surface is far enough away and large enough, the returning waves arrive at your ears as a recognizable echo.

For an echo to be clearly heard, two conditions must be met. First, the reflecting surface must be at least seventeen metres away from the listener. If it is closer than that, the echo arrives so quickly that the brain blends it with the original sound, and you hear only one continuous noise. Second, the surface must be firm and smooth. Soft surfaces like curtains, snow, or thick grass absorb sound waves instead of reflecting them, which is why a forest in winter often sounds strangely quiet.

Echoes are not just an interesting noise. They are tools. Bats use echoes to find insects in total darkness, sending out high-pitched squeaks and listening for the returning waves. This skill is called echolocation. Submarines and ships use a related technology called sonar to map the ocean floor or detect other vessels underwater. Doctors use a similar technique, called ultrasound, to take pictures inside the human body without surgery.

The next time you hear an echo in a stairwell or a tunnel, remember that you are listening to physics in action — and to one of the oldest tools in nature.

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

A. Bats are the only animals that use echoes to find their food in the dark

B. Sound travels through the air in much the same way ripples spread on water

C. Submarines and ships use sonar technology to detect underwater objects

D. Echoes form when sound waves bounce off a surface and return to the listener

14. According to the passage, why do SOFT surfaces fail to produce strong echoes?

A. They absorb sound waves instead of reflecting them back to the listener

B. They cause the sound waves to break apart suddenly in midair

C. They reflect the sound waves but only in the wrong direction

D. They make the sound waves move much faster than they normally would

15. What does the word "absorb" mean as it is used in the third paragraph?

A. To make a sound much louder than it originally was

B. To send a signal across a great distance to a faraway listener

C. To take in something without sending it back out again

D. To bounce in many different directions at the same time

16. What is the minimum distance a reflecting surface must be from a listener for an echo to be CLEARLY heard?

A. Five metres

B. Seventeen metres

C. One hundred metres

D. One full kilometre

17. According to the passage, which of the following uses a process RELATED to echoes?

A. A camera taking a high-quality photograph in low light

B. A telescope used to observe distant planets in deep space

C. A microscope used to view tiny cells in a drop of water

D. A doctor using ultrasound to take an image of a patient

18. Open-Response. Explain why the author calls echoes "tools" in the passage. Use specific details from the passage to support your answer.

(Write your response in the space provided.)

SESSION C: WRITING — CONVENTIONS & COMPOSITION

Answer Questions 19 through 30 by selecting the best answer. Then complete the writing prompt in Question 31.

19. Which sentence uses an apostrophe CORRECTLY to show possession?

A. The mens' team won the championship trophy this year

B. The mens team won the championship trophy this year

C. The men's team won the championship trophy this year

D. The mens's team won the championship trophy this year

20. Which sentence is a COMPLEX sentence?

A. When the lights went out, the children gasped in surprise

B. The lights went out and the children gasped in surprise

C. The lights went out. The children gasped in surprise

D. The lights went out; the children gasped in surprise

21. Which sentence uses verb tense CORRECTLY to describe a past completed action?

A. By the time we arrive, the movie will start without us

B. By the time we arrive, the movie has start without us

C. By the time we arrived, the movie was starting in the theatre

D. By the time we arrived, the movie had already started

22. Which sentence uses colons and commas CORRECTLY?

A. She packed three items in her bag, a notebook, a pen, and a water bottle

B. She packed three items in her bag: a notebook, a pen, and a water bottle

C. She packed three items in her bag; a notebook, a pen, and a water bottle

D. She packed three items in her bag a notebook, a pen, and a water bottle

23. Which sentence shows CORRECT subject–verb agreement?

A. The pair of socks are missing from the bottom drawer

B. Neither of the answers were correct on the math test

C. The flock of geese flies south every autumn for the winter

D. Each of the students need to bring a sharpened pencil

24. Which word in the sentence below is an ADVERB?

She quickly opened the colourful birthday gift.

A. opened

B. colourful

C. birthday

D. quickly

25. Which sentence uses capitalization CORRECTLY?

A. Our class is reading a book called The Bridge to Terabithia this term

B. Our class is reading a book called the bridge to terabithia this term

C. our Class is reading a Book called the bridge to terabithia this Term

D. Our Class is Reading a Book called The Bridge to Terabithia this Term

26. Choose the sentence that uses PRONOUNS correctly.

A. Me and her went to the library together after school yesterday

B. She and I went to the library together after school yesterday

C. Her and I went to the library together after school yesterday

D. Me and she went to the library together after school yesterday

27. Which sentence uses commas CORRECTLY?

A. The dog, sat on the porch, while the rain fell heavily

B. The dog sat on the porch, while the rain fell heavily

C. The dog sat on, the porch while the rain fell heavily

D. The dog sat on the porch while the rain fell heavily

28. Which transitional word BEST completes the sentence?

We needed eggs, milk, and butter; _____, we walked to the corner store.

A. however

B. nevertheless

C. therefore

D. instead

29. Which sentence is written in PASSIVE voice?

A. The novel was written by a famous Canadian author last year

B. The famous Canadian author wrote the novel during the winter

C. A famous Canadian author writes many novels every single year

D. The novel will sell millions of copies worldwide in the future

30. Which sentence correctly uses a RELATIVE PRONOUN?

A. The artist which created the mural is now famous worldwide

B. The artist who created the mural is now famous worldwide

C. The artist whose created the mural is now famous worldwide

D. The artist what created the mural is now famous worldwide

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31. Open-Response — Writing Prompt.

Think about an activity, hobby, or skill that you enjoy doing. Write a piece in which you describe this activity and explain what makes it enjoyable or important to you.

Be sure to:

- Have a clear focus and main idea
- Include specific details that help the reader picture the activity
- -Organize your ideas logically
- Use correct grammar, spelling, and punctuation

(Write your response in the space provided.)

SESSION D: MATHEMATICS — STAGE 1

Answer Questions 32 through 50 by selecting the best answer.

32. What is the value of the digit 6 in the number 7,206,485?

A. 6

B. 600

C. 60,000

D. 6,000

33. Round the number 12.847 to the nearest hundredth.

A. 12.8

B. 12.84

C. 12.85

D. 12.9

34. Which fraction is the LARGEST?

A. 7/8

B. 3/4

C. 5/8

D. 2/3

35. What is 4.5 × 6?

A. 24

B. 27

C. 28

D. 30

36. What is 1/2 + 1/4?

A. 1/6

B. 2/6

C. 1/3

D. 3/4

37. What is 50% of 80?

A. 40

B. 30

C. 50

D. 20

38. Which list of decimals is ordered from GREATEST to LEAST?

A. 0.4, 0.5, 0.45, 0.55

B. 0.5, 0.4, 0.45, 0.55

C. 0.55, 0.5, 0.45, 0.4

D. 0.45, 0.5, 0.4, 0.55

39. What is 248 ÷ 4?

A. 60

B. 62

C. 64

D. 66

40. A pizza is cut into 8 equal slices. Marcus eats 3 slices. What FRACTION of the whole pizza did Marcus eat?

A. 8/3

B. 5/8

C. 1/8

D. 3/8

41. Evaluate the expression $3x - 7$ when $x = 5$.

A. 8

B. 15

C. 22

D. −2

42. Solve for n: n + 14 = 25

A. 39

B. 11

C. 14

D. 25

43. Look at this pattern: 2, 5, 8, 11, 14, … What is the 7th term in the pattern?

A. 17

B. 26

C. 20

D. 23

44. Simplify the expression: 8y − 3y + 5y

A. 6y

B. 8y

C. 12y

D. 10y

45. Which inequality is TRUE?

A. 0.45 > 0.4

B. $0.4 > 0.45$

C. $0.45 = 0.4$

D. $0.45 + 0.4 = 1$

46. The mean of five test scores is 80. The first four scores are 85, 78, 90, and 76. What is the FIFTH score?

A. 75

B. 73

C. 80

D. 71

47. What is the median of these numbers: 9, 4, 12, 7, 15, 6, 11?

A. 7

B. 11

C. 9

D. 12

48. A bag contains 5 yellow marbles, 4 red marbles, and 3 green marbles. What is the probability of randomly drawing a YELLOW marble?

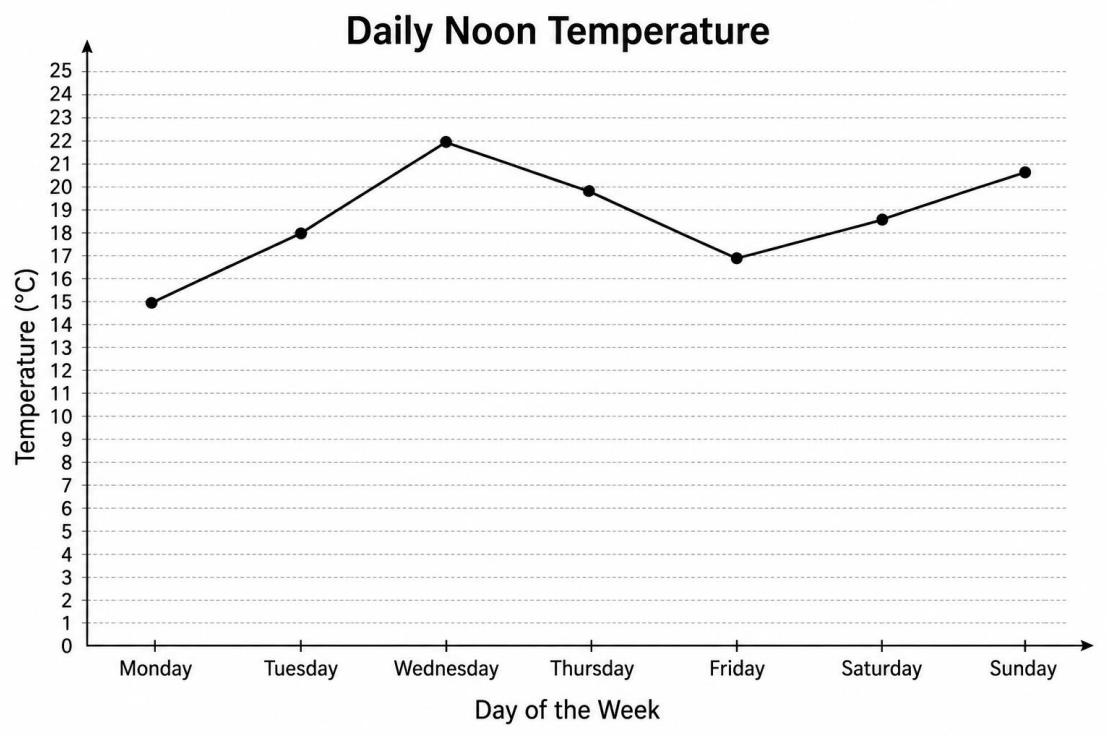
A. 5/8

B. 5/12

C. 1/3

D. 4/12

49. The line graph below shows the temperature at noon on each day of one week. On which day was the temperature the HIGHEST?



A. Wednesday

B. Sunday

C. Tuesday

D. Thursday

50. A standard six-sided die has the numbers 1 through 6 on its faces. What is the probability of rolling a number LESS than 4?

A. 1/6

B. 1/2

C. 1/3

D. 2/3

SESSION D: MATHEMATICS — STAGE 2

Answer Questions 51 through 75 by selecting the best answer.

51. At a school fundraiser, 3/5 of the students chose to participate. If there are 250 students in total, how many students participated?

A. 75

B. 100

C. 125

D. 150

52. A delivery driver brings 36 packages to each of 24 stores. How many packages does she deliver in total?

A. 60

B. 720

C. 864

D. 960

53. What is the value of the expression 2a + 3b when a = 4 and b = 5?

A. 23

B. 20

C. 19

D. 35

54. Look at this pattern: 1, 4, 9, 16, 25, … Which statement BEST describes the rule for this pattern?

A. Add 3 to the previous term each time

B. Add 5 to the previous term each time

C. The nth term equals n multiplied by itself

D. Multiply each term by 2 then subtract 1

55. Solve for x: $2x + 8 = 20$

A. 4

B. 6

C. 10

D. 14

SESSION D: MATHEMATICS — STAGE 3 (CONTINUED)

56. A rectangle has a length of 12 cm and a width of 8 cm. What is its perimeter?

A. 20 cm

B. 96 cm

C. 24 cm

D. 40 cm

57. What is the volume of a rectangular prism with dimensions 5 cm × 4 cm × 3 cm?

A. 60 cm^3

B. 47 cm^3

C. 12 cm^3

D. 120 cm^3

58. In a triangle, two of the interior angles measure 45° and 65°. What is the measure of the THIRD angle?

A. 60°

B. 70°

C. 75°

D. 80°

59. Convert 2,500 millilitres into litres.

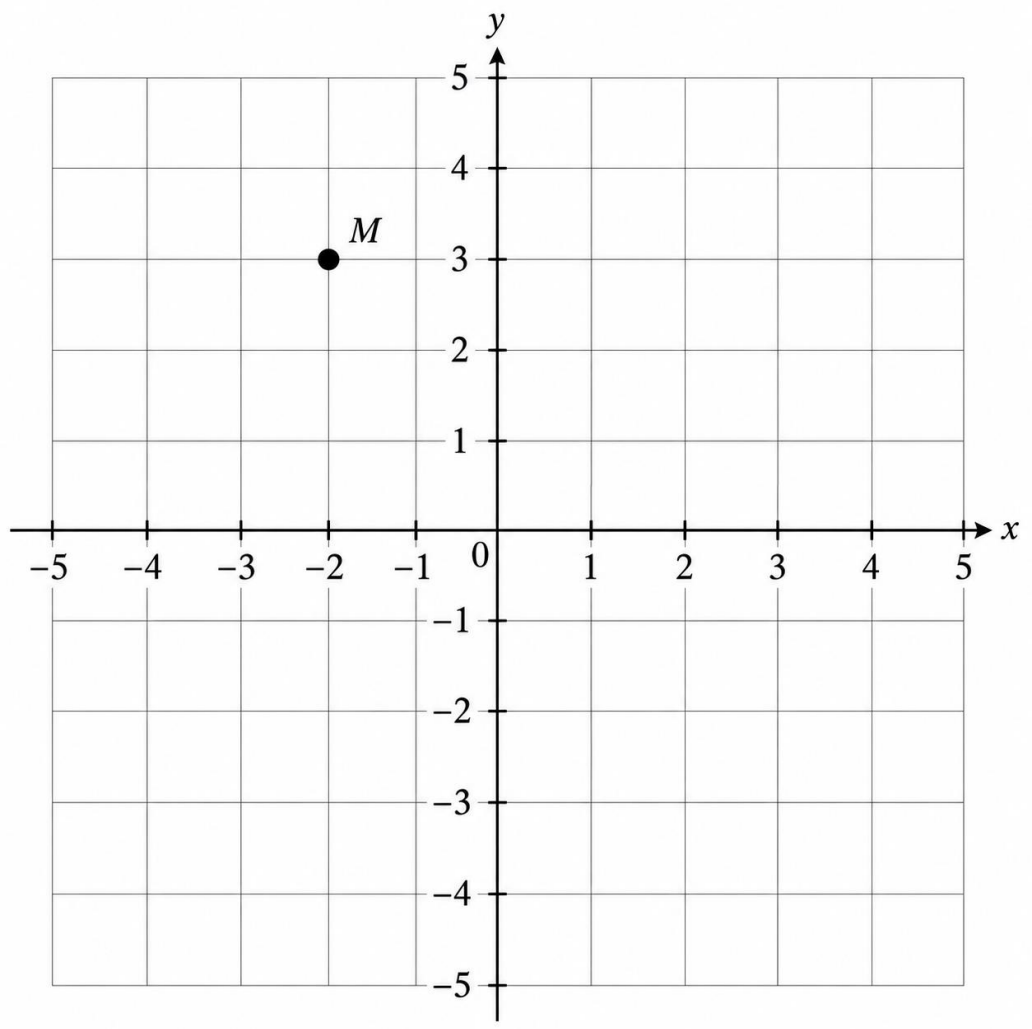
A. 0.25 L

B. 25 L

C. 250 L

D. 2.5 L

60. On the coordinate plane below, what are the coordinates of point M?



A. (−2, 3)

B. (2, 3)

C. (3, −2)

D. (−3, 2)

61. The point R(5, −3) is rotated 90° clockwise about the origin. What are the new coordinates of R'?

A. (−3, 5)

B. (5, 3)

C. (−3, −5)

D. (3, 5)

62. How many lines of symmetry does a regular hexagon have?

A. 4

B. 6

C. 2

D. 8

63. A square has an area of 49 cm^2. What is the length of each side?

A. 24.5 cm

B. 14 cm

C. 12.25 cm

D. 7 cm

64. Which of the following describes an OBTUSE angle?

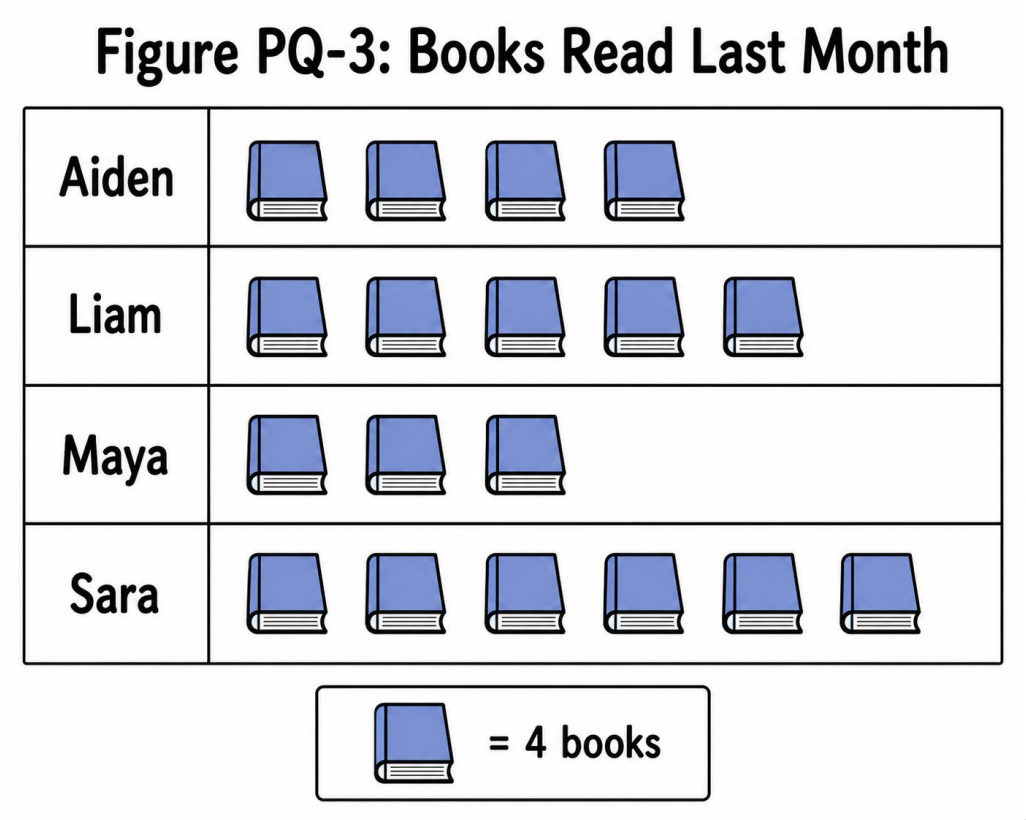
A. An angle that measures more than 90° but less than 180°

B. An angle that measures exactly 90° between two rays

C. An angle that measures less than 90° from any vertex

D. An angle that measures exactly 180° in a straight line

65. The pictograph below shows the number of books read by four students last month. According to the pictograph, how many books did Liam read?



A. 5

B. 20

C. 18

D. 12

66. A class survey shows that 12 out of 30 students walk to school. What PERCENTAGE of students walk to school?

A. 12%

B. 25%

C. 30%

D. 40%

67. A jar contains 8 red marbles, 6 blue marbles, and 6 white marbles. What is the probability of drawing a marble that is NOT red?

A. 8/20

B. 6/20

C. 3/5

D. 1/2

68. What is the least common multiple (LCM) of 6 and 8?

A. 24

B. 48

C. 14

D. 12

69. Look at the pseudocode below.

SET counter = 0

FOR each number from 1 to 5: IF the number is even THEN add 1 to counter

Display counter

What value will be displayed?

A. 5

B. 2

C. 3

D. 15

70. Which of the following is EQUIVALENT to the fraction 3/4?

A. 0.34

B. 0.43

C. 75%

D. 34%

71. A school bus can hold up to 48 passengers. If 7 buses are needed to transport students on a field trip, what is the MAXIMUM number of students that can be transported?

A. 270 students at full capacity

B. 296 students at full capacity

C. 312 students at full capacity

D. 336 students at full capacity

SESSION D: MATHEMATICS — STAGE 4

72. Maya deposits $500 into a savings account that earns 2% simple interest each year. How much interest will she earn after ONE year?

A. $10

B. $20

C. $25

D. $50

73. Which payment method allows a person to BORROW money from a bank and pay it back later, often with interest if not paid in full each month?

A. Cash

B. Debit card

C. Credit card

D. Cheque

74. James wants to save $360 over 12 months. If he saves the same amount each month, how much should he save monthly?

A. $25 per month

B. $30 per month

C. $36 per month

D. $40 per month

75. Which of the following BEST describes TRADING?

A. Giving money or resources to someone without expecting any return

B. Receiving money from a bank that must be paid back with interest

C. Exchanging one item or service for another of approximately equal value

D. Storing money in a savings account to earn interest over time

ANSWER KEY & DETAILED EXPLANATIONS – SIMULATION EXAM 3

1. A — The opening sentence states directly: "Anika first saw the sketchbook on the seat across from her on the bus." This is a recall question whose answer appears verbatim in the first line of the passage.

2. C — The passage states that Anika stepped off "with the sketchbook tucked under her arm," and "at home, she sat on her bed and opened it." Taking the sketchbook home and examining it for clues is the explicit action she chose.

3. B — The narrator describes the sketchbook as "small, brown, and bound with a thin leather strap" and notes that it "looked old, almost antique." Leather binding and the word "antique" are the textual signals of age.

4. D — On the inside front cover, the passage states, "in careful writing, were three words: Property of Theo." This is a direct-recall detail explicitly named in the text.

5. C — In context, "antique" describes the sketchbook as old and possibly important enough to handle carefully. The meaning fits "old and possibly valuable," while the other options describe damage, newness, or decoration that the passage does not support.

6. D — Priya turns to a specific page showing "a small storefront — a window with curved letters... a striped awning, a bench by the door" and asks, "Doesn't that look like Maple Café?" Her recognition of the café in the drawing gives Anika the lead she needs.

7. A — The passage describes Theo's face as it "shifted from confusion to recognition to something that Anika could only call relief." This sequence of emotions is given in order, matching option A precisely.

8. B — Theo tells Anika directly: "My grandfather made this. He passed away last spring." The sketchbook's value comes from being a creation of a grandfather who has died, not from the other origins the distractors suggest.

9. C — Anika picks up the lost sketchbook, takes it home, brings it to school, asks her friend for help, and walks across town to return it. Each action shows careful, considerate behaviour, fitting "thoughtful" rather than greedy, forgetful, or suspicious.

10. A — In the closing paragraph, Anika "could feel that she had done something that mattered." Her feeling is quiet, internal contentment about a meaningful act, not disappointment, anger, or worry.

11. B — The story centres on a single small act — returning a lost sketchbook — that turns out to mean a great deal to someone Anika does not even know. This is the theme that small kindness carries meaning beyond what we can see.

12. OPEN-RESPONSE — A strong Code 40 response identifies multiple specific ways Priya helps Anika: she examines the drawings carefully, she recognizes Maple Café in one of the sketches even when Anika does not, and her observation directs Anika to the location where she finds Theo. Code 40 responses cite specific moments from the lunch-table scene and explain how each helps move the search forward.

13. D — The passage opens with the definition of an echo and devotes its body to how sound waves bounce off surfaces, the conditions needed for an echo to form, and how the principle is applied. Option D captures this central explanation.

14. A — The passage states directly that "soft surfaces like curtains, snow, or thick grass absorb sound waves instead of reflecting them." Without reflection, no echo returns to the listener.

15. C — In the context of sound waves, to "absorb" them means to take them in so they do not bounce back. The passage contrasts soft surfaces (which absorb) with hard surfaces (which reflect), making "take in without sending back" the correct meaning.

16. B — The passage gives the exact figure: "the reflecting surface must be at least seventeen metres away from the listener." Closer surfaces produce a return that the brain blends with the original sound.

17. D — The passage names ultrasound as a related technique that "doctors use… to take pictures inside the human body without surgery." This is the only listed application that uses sound-wave reflection in the same way as an echo.

18. OPEN-RESPONSE — A strong Code 40 response identifies the specific real-world uses listed in the passage: bats use echolocation to find insects in darkness, submarines and ships use sonar to map the ocean floor or detect other vessels, and doctors use ultrasound to image inside the body. Code 40 responses cite each example and explain how it shows that echoes are practical tools, not just curious sounds.

19. C — The plural of "man" is the irregular form "men," and the possessive of "men" is formed by adding 's, giving "men's." The other options misplace the apostrophe or omit it entirely.

20. A — A complex sentence contains one independent clause and at least one dependent clause. "When the lights went out" is dependent and "the children gasped in surprise" is independent, making A complex; B is compound, C is two simple sentences, and D is compound joined by a semicolon.

21. D — "Had already started" is past perfect, used to show that one past action was completed before another past action. The movie's start (earlier) is correctly placed before the arrival (later) through this tense pairing.

22. B — A colon is used to introduce a list after a complete independent clause, and the items in the list are separated by commas. Option B applies both rules correctly, while A uses a comma where a colon should go, C uses a semicolon, and D omits the punctuation entirely.

23. C — A collective noun like "flock" is grammatically singular when treated as a single unit, so it takes the singular verb "flies." Options A, B, and D pair singular subjects (pair, neither, each) with plural verbs, breaking agreement.

24. D — An adverb modifies a verb, adjective, or another adverb. "Quickly" modifies the verb "opened" to describe how the action was performed; "colourful" is an adjective, "birthday" is a noun modifier, and "opened" is the verb itself.

25. A — In title case, the first word and all major words of a title are capitalized, while short prepositions like "to" stay lowercase. "The Bridge to Terabithia" follows this rule, while the other options either lose the proper-noun capitals or capitalize every word.

26. B — Subjects of a sentence require subjective pronouns (I, she, he, we, they). "She and I went" correctly uses two subjective pronouns, while A, C, and D use objective forms (me, her) as subjects, which is incorrect.

27. D — When a dependent clause introduced by "while" follows the main clause and is essential to the meaning, no comma is needed between them. Option D correctly omits the comma; A overuses commas, B inserts one unnecessarily, and C breaks the prepositional phrase apart.

28. C — The two clauses share a cause-and-effect relationship: needing groceries caused the trip to the store. "Therefore" signals consequence, while "however" and "nevertheless" signal contrast and "instead" signals replacement.

29. A — Passive voice places the receiver of the action in the subject position and uses a form of "to be" plus a past participle. "The novel was written" follows this structure exactly, while the other options are active voice with the doer in the subject position.

30. B — When the relative pronoun refers to a person, "who" is correct. "Which" is used for things, "whose" shows possession (and requires a following noun), and "what" does not function as a relative pronoun in this construction.

31. OPEN-RESPONSE — A strong Code 30 or 40 response chooses a specific activity, describes it with vivid sensory or procedural detail, and explains the personal significance through reasons or examples rather than vague statements. The strongest responses move beyond "I like it because it is fun" to show what makes the activity meaningful through concrete moments or learning.

32. D — In 7,206,485, the digit 6 sits in the thousands place. Its value is $6 \times 1{,}000 = 6{,}000$. Place value increases by a factor of 10 with each position to the left of the decimal point.

33. C — To round 12.847 to the nearest hundredth, look at the thousandths digit (7). Since $7 \geq 5$, round the hundredths digit up from 4 to 5, giving 12.85.

34. A — Converting to decimals: $7/8 = 0.875$, $3/4 = 0.75$, $5/8 = 0.625$, $2/3 \approx 0.667$. The largest value, 0.875, corresponds to 7/8.

35. B — Break the multiplication into easier parts: $4.5 \times 6 = (4 \times 6) + (0.5 \times 6) = 24 + 3 = 27$. Splitting decimals into whole and fractional pieces is a reliable mental-math approach.

36. D — Rewrite 1/2 as 2/4 to create a common denominator with 1/4. Then $2/4 + 1/4 = 3/4$. Fractions can only be added when their denominators match.

37. A — 50% means half, so 50% of $80 = 80 \div 2 = 40$. This benchmark percent shortcut is one of the most useful mental-math tools.

38. C — Aligning decimals by place value: 0.55, 0.50, 0.45, 0.40. From greatest to least, this is 0.55, 0.5, 0.45, 0.4, matching option C.

39. B — Divide 248 by 4 by splitting it into compatible numbers: $240 \div 4 = 60$ and $8 \div 4 = 2$, giving $60 + 2 = 62$. Distributing division over a sum simplifies mental calculation.

40. D — Marcus ate 3 of 8 equal slices, so his fraction is 3 (parts eaten) over 8 (total parts), giving 3/8. The numerator counts what is taken; the denominator counts the whole.

41. A — Substitute $x = 5$ into $3x - 7$: $3(5) - 7 = 15 - 7 = 8$. Order of operations requires multiplication before subtraction.

42. B — Subtract 14 from both sides of the equation: $n = 25 - 14 = 11$. The balance principle requires the same operation on both sides.

43. C — The common difference is 3, and the rule is $3n - 1$. For the 7th term: $3(7) - 1 = 21 - 1 = 20$. Using the algebraic rule jumps directly to any term.

44. D — Combine like terms by adding and subtracting coefficients: $8 - 3 + 5 = 10$, giving 10y. The variable remains the same when like terms are combined.

45. A — When comparing 0.45 and 0.4, treat them as 0.45 and 0.40. Since 45 hundredths exceeds 40 hundredths, $0.45 > 0.4$ is the only true inequality among the four options.

46. D — Mean × count = total, so the total of all five scores is $80 \times 5 = 400$. The first four scores total $85 + 78 + 90 + 76 = 329$, so the fifth score is $400 - 329 = 71$.

47. C — Order the values: 4, 6, 7, 9, 11, 12, 15. With seven values (an odd count), the median is the middle (4th) value, which is 9.

48. B — Total marbles = $5 + 4 + 3 = 12$. Favourable outcomes (yellow) = 5, so probability = 5/12. Probability is always favourable outcomes divided by total outcomes.

49. A — From the line graph, the highest plotted point is Wednesday at 22°C. The other days' temperatures (15, 18, 20, 17, 19, 21) all fall below Wednesday's value.

50. B — Numbers less than 4 on a six-sided die are 1, 2, and 3, giving 3 favourable outcomes out of 6 total. Probability = $3/6 = 1/2$.

51. D — To find 3/5 of 250, divide 250 by 5 (= 50), then multiply by 3 (= 150). The "of" in fraction problems always indicates multiplication.

52. C — Multiply 36×24 using the breakdown method: $36 \times 20 = 720$ and $36 \times 4 = 144$, then $720 + 144 = 864$. Splitting one factor into easier parts is a reliable technique.

53. A — Substitute the given values into the expression: $2(4) + 3(5) = 8 + 15 = 23$. Each variable is replaced with its assigned value before applying the order of operations.

54. C — The terms are 1^2, 2^2, 3^2, 4^2, 5^2, where each is the square of its position number. The rule "nth term = n × n" describes this exactly, while the other options do not generate the given values.

55. B — Subtract 8 from both sides: $2x = 12$. Divide both sides by 2: $x = 6$. Two-step equations are solved by undoing operations in reverse order.

56. D — The perimeter of a rectangle is $2(\text{length} + \text{width}) = 2(12 + 8) = 2(20) = 40$ cm. The formula doubles the sum of one length and one width to account for all four sides.

57. A — The volume of a rectangular prism is length × width × height = $5 \times 4 \times 3 = 60$ cm³. Volume measures three-dimensional space, so the unit is cubed.

58. B — The interior angles of a triangle always sum to 180°. With two angles known: 180 − 45 − 65 = 70°. This sum holds for every triangle regardless of shape or size.

59. D — Since 1 litre = 1,000 millilitres, convert by dividing: 2,500 ÷ 1,000 = 2.5 L. Moving from a smaller unit to a larger unit requires division.

60. A — Point M sits 2 units to the left of the y-axis (so x = −2) and 3 units above the x-axis (so y = 3), giving the coordinates (−2, 3). Coordinates are always written in the order (x, y).

61. C — A 90° clockwise rotation about the origin maps (x, y) to (y, −x). Applying this to (5, −3): the new x = y = −3, and the new y = −x = −5, giving (−3, −5).

62. B — A regular hexagon has six equal sides and six equal angles, producing six lines of symmetry — three through opposite vertices and three through the midpoints of opposite sides. A regular polygon's number of lines of symmetry always equals its number of sides.

63. D — A square's area equals side × side, so the side equals √area = √49 = 7 cm. The side length is always the positive square root of the area.

64. A — An obtuse angle measures more than 90° but less than 180°. By definition: acute < 90°, right = 90°, obtuse is between 90° and 180°, and straight = 180°.

65. B — Liam's row shows 5 book icons, and the legend states each icon represents 4 books, so 5 × 4 = 20 books. Pictographs are decoded by multiplying the number of icons by the value of each icon.

66. D — Convert 12/30 to a percent by dividing: 12 ÷ 30 = 0.4, which equals 40%. A fraction "out of 30" becomes a percent "out of 100" through this division.

67. C — Total marbles = 8 + 6 + 6 = 20. Not-red marbles = 6 + 6 = 12. So P(not red) = 12/20, which simplifies to 3/5 by dividing both numbers by 4.

68. A — Multiples of 6: 6, 12, 18, 24, 30, … Multiples of 8: 8, 16, 24, 32, … The smallest number appearing in both lists is 24. The LCM is the smallest common multiple, not the largest common factor.

69. B — The loop checks each number from 1 to 5 and adds 1 to the counter only for even numbers. The even numbers in this range are 2 and 4, so the counter increases twice and the final value is 2.

70. C — 3/4 equals 0.75 in decimal form, which equals 75 percent. Fractions, decimals, and percents are three equivalent ways to express the same value, and converting between them is a core Grade 6 skill.

71. D — Multiply capacity by the number of buses: 48 × 7 = 336 students. Maximum capacity assumes every seat on every bus is filled.

72. A — Simple interest = principal × rate × time = $500 × 0.02 × 1 = $10. The 2% rate is converted to its decimal form 0.02 before multiplying.

73. C — Credit cards allow a person to borrow money from a card issuer up to a set limit and pay it back later, with interest charged on any unpaid balance. Cash and debit cards use only money the person already has, and cheques draw on existing bank funds rather than borrowed money.

74. B — Divide the savings goal by the time available: $360 ÷ 12 = $30 per month. Breaking a financial goal into equal periodic deposits is a fundamental planning step.

75. C — Trading means exchanging one item or service for another of approximately equal value, usually with money as the medium of exchange. Option A describes donating, B describes borrowing, and D describes saving.