

SIMULATION EXAM 8 (75 QUESTIONS)

SESSION A: READING — NARRATIVE TEXT

Read the story below. Then answer questions 1 to 12.

The Audition

Eliana had practised in her bedroom mirror for two weeks. Every morning before school, she stood in front of the dresser with her crumpled audition sheet and read the monologue out loud. Some mornings the words came out steady and clear. Other mornings, her voice wobbled before she even reached the second line.

The play was *The Lighthouse Keeper*, and the part she wanted was Marin — the keeper's daughter who spots the ship in the storm. Marin had eight lines.

On the morning of the audition, Eliana ate exactly half of her breakfast, then put on her sweater inside out without noticing. Her father pointed it out at the bus stop and helped her fix it. He told her she would do great, but Eliana could already feel the small fluttering in her chest that would grow into something larger by the time she stood at the front of the gym.

Mrs. Yoo, the drama teacher, was sitting at a folding table when Eliana arrived. Five chairs faced the table, and three of them were already taken. Eliana sat in the empty chair at the end and watched as the other students were called one by one to the small mark of tape on the floor in front of the table.

The first student was Owen. He spoke too fast and forgot one of the lines, but he laughed about it and kept going. The second was a girl Eliana did not know — quiet, careful, every word in its proper place. The third was Owen's older sister, who read with so much feeling that Mrs. Yoo nodded twice during her audition.

Then Mrs. Yoo called Eliana's name.

The walk to the tape on the floor felt long. Eliana could hear her own footsteps. When she stopped and turned to face the table, the fluttering in her chest had become a drumbeat in her ears.

She began.

The first line came out softer than she had planned. The second was a little steadier. By the fourth line, she had stopped thinking about her hands or her feet or whether her sweater was on the right way. She was just speaking — speaking as Marin, looking out a window that was not really there at a ship that was not really there in a storm that was not really there.

When she finished, Mrs. Yoo looked at her notes and said only, "Thank you, Eliana."

That was all.

Eliana walked back to her chair. She did not know if she had done well. She did not know if her quiet first line had ruined her chances, or if her steadier middle lines had saved them. She did not know whether she would get the part of Marin, or any part at all.

But she had walked to the tape. She had stood in front of the table. She had said her lines all the way through.

On the bus home she looked out the window and thought about the lighthouse keeper's daughter, scanning the sea for a ship she could not yet see. She thought she understood that part of the play a little better now.

1. For how long had Eliana practised her monologue before the audition?

- A. For about one week before the audition was scheduled
- B. For one full month before she went to the audition that morning
- C. Since the school year began in September of that year
- D. For two weeks, practising every morning before school

2. What is the title of the school play Eliana is auditioning for?

- A. The Stormy Sea
- B. The Ship at Dawn
- C. The Lighthouse Keeper
- D. The Keeper's Daughter

3. Which part is Eliana hoping to be cast as in the school play?

- A. Marin, the lighthouse keeper's daughter who spots the ship
- B. The narrator who introduces each scene of the play to the audience
- C. The captain of the ship caught in the storm at sea that night
- D. One of the lighthouse keepers who watches over the rocky coast

4. How many lines does the part of Marin contain?

- A. Five lines
- B. Eight lines
- C. Twelve lines
- D. Twenty lines

5. What sign of nervousness does Eliana show on the morning of the audition?

- A. She ate her entire breakfast quickly without sitting down at the table
- B. She forgot the address of the school and missed the bus by ten minutes
- C. She decided not to go to the audition until her father convinced her
- D. She put on her sweater inside out without noticing it that morning

6. Who notices that Eliana's sweater is on inside out?

- A. Her father, at the bus stop on the way to school
- B. Her mother, at the breakfast table before she leaves
- C. Mrs. Yoo, the drama teacher who runs the audition
- D. The other students sitting in the chairs at the audition

7. Who is the drama teacher running the audition?

- A. Mrs. Morrow
- B. Mrs. Patel
- C. Mrs. Yoo
- D. Mrs. Beaumont

8. When Eliana arrived in the gym, how many of the five audition chairs were already taken?

- A. Two of the chairs were already taken when she walked in
- B. Three of the chairs were already taken when she walked in
- C. Four of the chairs were already taken when she walked in
- D. All five of the chairs were already taken when she walked in

9. Who was the FIRST student called to audition before Eliana?

- A. Owen, the student who spoke fast and laughed at his mistake
- B. Owen's older sister, who read her lines with great feeling
- C. A quiet girl whom Eliana did not recognize from her class
- D. Mrs. Yoo's assistant from the drama club of the previous year

10. What does the word "fluttering" MOST LIKELY suggest about how Eliana feels?

- A. A sense of calm certainty about the audition she is about to perform
- B. A feeling of boredom and complete lack of interest in the play that day
- C. A sudden burst of confidence that pushes her to walk faster than usual
- D. A light, quick, nervous sensation in her chest before she has to perform

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

- A. Talented students will always be chosen for the most important parts
- B. It is important to memorize every single line before any audition
- C. Doing something difficult is an accomplishment even without certain success
- D. Drama teachers always give clear feedback to students after each audition

12. Describe how Eliana changes between the beginning of the audition and the end. Use specific details from the passage to support your answer.

(Write your response on the lines provided. Use specific details from the passage.)

Tides are caused mostly by the gravity of the Moon.

The Moon is much smaller than the Earth, but it is close enough that its gravity tugs gently on everything on our planet. Solid land barely moves, but ocean water is free to shift. As the Earth spins, the side facing the Moon bulges slightly toward it. This bulge of water is what we call a high tide. The side of Earth facing away from the Moon also bulges out, because of the way gravity and motion balance against each other on a spinning planet. So there are actually two high tides happening at the same time on opposite sides of Earth — and two low tides in between.

Because the Earth spins once every 24 hours, most coasts experience two high tides and two low tides every day. The cycle takes a little more than 24 hours because the Moon is also moving in its orbit, which is why high tide arrives about 50 minutes later each day.

The Sun pulls on the oceans too, but because it is so far away, its effect is smaller — about half as strong as the Moon's. When the Sun, Earth, and Moon line up (during new and full moons), their combined pull creates extra-high tides called spring tides. When the Sun and Moon are at right angles to each other (during the first and third quarter moons), their pulls partly cancel out, producing smaller tides called neap tides.

Tides matter for more than just beachgoers. Ships need to know when the tide will be high enough to enter a harbour safely. Fishers plan their work around the cycle. Coastal animals — clams, crabs, sea stars — have evolved to live in the in-between zone that is sometimes underwater and sometimes exposed to the air.

The tide is one of the most steady forces on Earth. It has been rising and falling on the same beaches for billions of years, long before anyone was there to notice it.

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

- A. The Moon is the most important object affecting the Earth's climate
- B. Tides happen twice every day and follow a 24-hour cycle exactly
- C. Tides are the rising and falling of the sea caused mainly by the Moon's gravity
- D. Coastal animals have evolved to survive in the in-between zone of the tides

14. According to the passage, what is the MAIN cause of tides?

- A. The gravity of the Moon pulling on the Earth's oceans
- B. The wind blowing across the surface of the ocean water
- C. The Earth's rotation pulling water toward the equator
- D. The currents from melting ice at the North and South poles

15. According to the passage, how many high tides do most coasts experience each day?

- A. One high tide each day, in the late afternoon hours
- B. Two high tides each day, on opposite sides of the Earth
- C. Three high tides each day, spaced eight hours apart from each other
- D. Four high tides each day, occurring every six hours

16. What is a SPRING tide?

- A. A small tide that happens only during the spring months of each year
- B. A tide that only affects the beaches in the northern hemisphere
- C. A tide caused by warm spring water flowing into the ocean each year
- D. An extra-high tide that happens when the Sun, Earth, and Moon line up

17. According to the passage, why does the Sun affect the tides LESS than the Moon does?

- A. The Sun is smaller than the Moon and has weaker gravity
- B. The Sun pulls in a different direction than the Moon does
- C. The Sun is much farther away from Earth than the Moon is
- D. The Sun pulls on the land instead of pulling on the ocean

SESSION C: WRITING — CONVENTIONS & COMPOSITION

19. Which sentence uses capital letters CORRECTLY?

- A. My uncle drove from Toronto to Montreal on Highway 401 last Tuesday
- B. My uncle drove from toronto to montreal on highway 401 last tuesday
- C. My Uncle drove from Toronto to Montreal on highway 401 last Tuesday
- D. My uncle drove from Toronto to Montreal on Highway 401 last tuesday

20. Which sentence shows CORRECT subject-verb agreement?

- A. The group of students were walking quickly to the library this morning
- B. Each of the boys are taking a turn at the front of the line today
- C. Neither the teacher nor the students was prepared for the surprise test
- D. The team of researchers presents its findings at the conference each year

21. Which sentence uses a pronoun with a CLEAR reference?

- A. When Sarah told Maria about the test, she was worried about the result
- B. When Sarah called Maria, Sarah told her about the test results from school
- C. When Sarah called her best friend Maria, she told her about the results
- D. After hearing the news, she told her about the test results from the class

22. Which sentence uses the plural possessive form CORRECTLY?

- A. The childrens' books were stacked neatly on the library shelf yesterday
- B. The childrens books were stacked neatly on the library shelf yesterday
- C. The children's books were stacked neatly on the library shelf yesterday

D. The child's books were stacked neatly on the library shelf yesterday

23. Which group of words is a DEPENDENT clause?

A. The puppy ran across the grassy field yesterday afternoon at recess

B. We watched the movie together as a family after dinner that evening

C. Because the puppy was tired, it fell asleep under the kitchen table

D. After the heavy storm finally passed in the early hours of dawn

24. Which sentence contains a COMMA SPLICE?

A. Although the rain was heavy, the parade continued down the street

B. The rain was heavy, the parade continued down the street as planned

C. The rain was heavy; the parade continued down the street as planned

D. The rain was heavy, but the parade continued down the street as planned

25. Which sentence would BEST serve as a topic sentence for a paragraph about why exercise is important for Grade 6 students?

A. Regular exercise helps Grade 6 students stay healthy, focused, and ready to learn

B. Many Grade 6 students play soccer at recess each day during the school year

C. My favourite type of exercise is swimming because it makes me feel relaxed

D. Last week, our gym teacher told us to do twenty jumping jacks every morning

26. Which sentence uses the MOST concrete and specific language?

A. The food was delicious and made everyone at the table really happy

B. The dinner tasted good and made the people sitting at the table happy

- C. The grilled salmon, drizzled with lemon butter, made everyone smile widely
- D. The meal was nice and the people sitting there enjoyed it a great deal

27. Which sentence is an INTERROGATIVE sentence?

- A. Please close the door quietly when you leave the classroom today
- B. Have you finished your homework for tomorrow morning yet?
- C. The new student introduced himself to the class on Monday morning
- D. What a wonderful surprise this birthday party turned out to be!

28. Which sentence is grammatically CORRECT?

- A. We don't have no homework to finish this weekend before Monday morning
- B. She doesn't never want to eat broccoli at dinner with her family again
- C. I can't hardly believe that summer vacation starts next week after school
- D. The students did not have any extra time to finish the test that morning

29. Which sentence uses a hyphen CORRECTLY in a compound modifier?

- A. The five year old child held tightly to his mother's hand at the park
- B. The five-year-old child held tightly to his mother's hand at the park
- C. The five-year old child held tightly to his mother's hand at the park
- D. The five year-old child held tightly to his mother's hand at the park

30. Which sentence shows CORRECT order of adjectives?

- A. The wooden small brown box sat on the shelf above the fireplace
- B. The brown wooden small box sat on the shelf above the fireplace

SESSION D: MATHEMATICS

32. What is the value of the digit 8 in the number 583,914?

- A. 80,000
- B. 8,000
- C. 800,000
- D. 800

33. What is 73×16 ?

- A. 1,118
- B. 1,148
- C. 1,228
- D. 1,168

34. Which fraction is GREATER than $\frac{3}{4}$?

- A. $\frac{2}{3}$
- B. $\frac{5}{8}$
- C. $\frac{7}{8}$
- D. $\frac{1}{2}$

35. Round 6,847 to the nearest hundred.

- A. 6,000
- B. 6,800
- C. 6,900
- D. 6,850

36. What is 15% of 200?

- A. 15
- B. 25
- C. 20
- D. 30

37. What is $7.2 - 3.85$?

- A. 3.35
- B. 3.45
- C. 4.35
- D. 4.45

38. Maya has 24 stickers. She gives $\frac{1}{3}$ of them to her brother. How many stickers does she give away?

- A. 6
- B. 12
- C. 8
- D. 4

39. What is the value of $5x + 2$ when $x = 4$?

- A. 14
- B. 20
- C. 24
- D. 22

40. Solve for n in the equation $n - 7 = 12$.

- A. 5
- B. 19
- C. 4
- D. 84

41. Look at this pattern: 80, 70, 60, 50, 40, ...

What is the pattern rule?

- A. Start at 80 and subtract 10 each time
- B. Start at 80 and divide by 2 each time
- C. Start at 80 and subtract 5 each time
- D. Start at 80 and add 10 each time

42. Look at the table of values below.

n	y
1	7

| 2 | 10 |

| 3 | 13 |

| 4 | 16 |

Which equation shows the relationship between n and y ?

A. $y = 7n$

B. $y = n + 7$

C. $y = 3n + 4$

D. $y = 4n + 3$

43. What is the MODE of this set of numbers: 5, 8, 3, 8, 2, 8, 6, 5?

A. 5

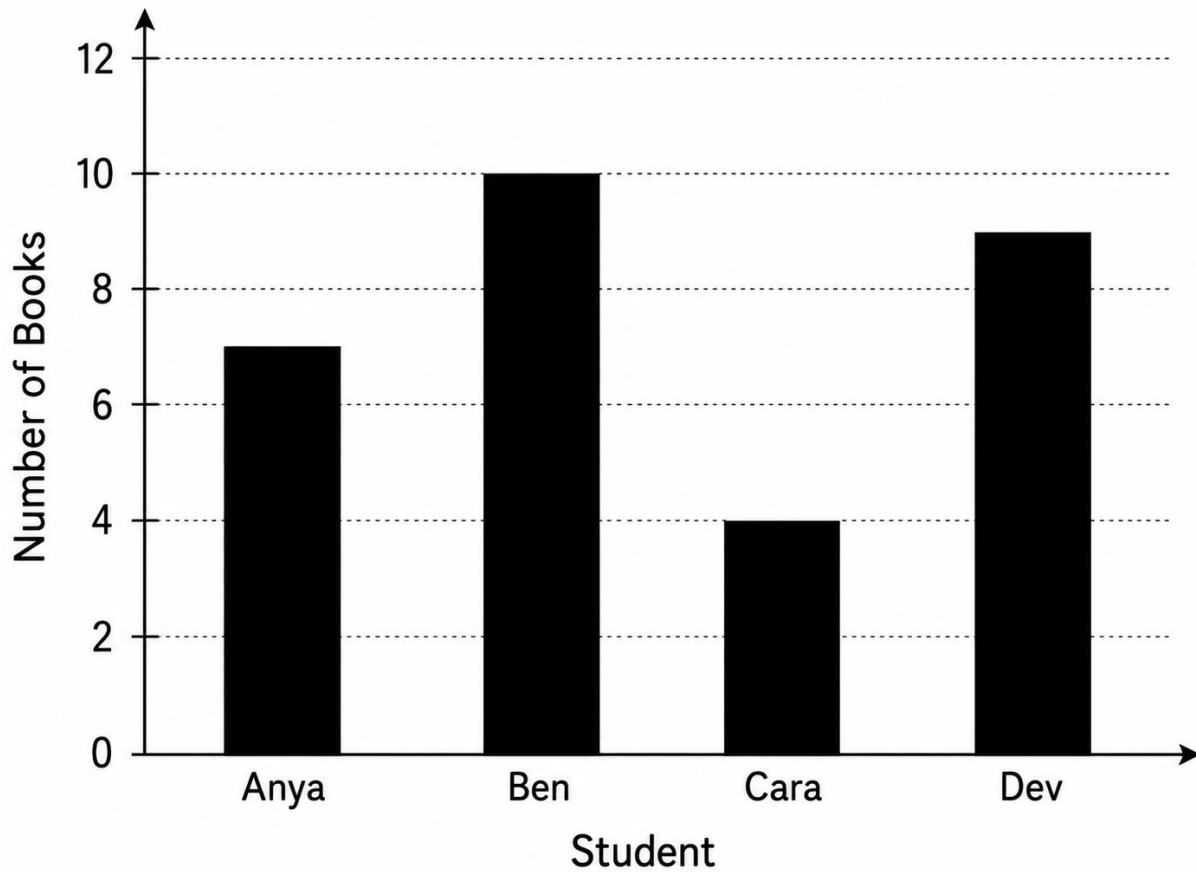
B. 8

C. 3

D. 6

44. Look at the bar graph below showing the number of books read by four students in March.

Books Read in March



How many MORE books did Ben read than Cara?

- A. 4
- B. 5
- C. 6
- D. 10

45. A spinner has 8 equal sections: 3 red, 2 blue, 2 green, and 1 yellow. What is the probability of landing on RED?

- A. $\frac{3}{8}$
- B. $\frac{5}{8}$

- C. $\frac{2}{8}$
- D. $\frac{1}{8}$

46. A regular hexagon has each side measuring 7 cm. What is its perimeter?

- A. 14 cm
- B. 28 cm
- C. 35 cm
- D. 42 cm

47. A square garden has sides that measure 6 m each. What is the AREA of the garden?

- A. 24 m^2
- B. 36 m^2
- C. 12 m^2
- D. 18 m^2

48. An angle measures 90° . What type of angle is it?

- A. Right
- B. Acute
- C. Obtuse
- D. Straight

49. How many vertices does a triangular prism have?

- A. 4
- B. 5

C. 7

D. 6

50. Aiden bought a sandwich for \$5.75 and a juice for \$2.50. How much did he pay in total?

A. \$7.25

B. \$8.25

C. \$7.75

D. \$8.75

SESSION D: MATHEMATICS

51. What is $936 \div 8$?

A. 117

B. 107

C. 123

D. 127

52. What is $\frac{1}{2} + \frac{1}{4}$?

A. $\frac{1}{6}$

B. $\frac{2}{6}$

C. $\frac{3}{4}$

D. $\frac{2}{4}$

53. What is 0.4×7 ?

- A. 0.28
- B. 28
- C. 0.47
- D. 2.8

54. Which decimal is the SMALLEST?

- A. 0.45
- B. 0.045
- C. 0.405
- D. 0.5

55. What is 75% written as a decimal?

- A. 0.75
- B. 7.5
- C. 0.075
- D. 75.0

56. Sara had \$50. She spent \$18 on a book and \$12 on lunch. How much money does she have LEFT?

- A. \$30
- B. \$32
- C. \$20
- D. \$80

57. Which mixed number is EQUIVALENT to $17/5$?

A. $3 \frac{1}{5}$

B. $3 \frac{2}{5}$

C. $2 \frac{3}{5}$

D. $4 \frac{1}{5}$

58. Solve for x in the equation $x/4 = 9$.

A. 13

B. 5

C. 2.25

D. 36

59. Which expression represents "a number n decreased by 6"?

A. $n - 6$

B. $6 - n$

C. $n + 6$

D. $6n$

60. A pattern follows the rule $y = 2n + 3$. What is the value of y when $n = 6$?

A. 9

B. 12

C. 13

D. 15

61. Which value of x makes the inequality $x > 8$ true?

- A. 5
- B. 8
- C. 12
- D. 0

62. Look at the pseudocode below:

...

SET sum = 0

FOR each number from 2 to 5:

 Add the number to sum

Display sum

...

What is the FINAL value of sum?

- A. 10
- B. 14
- C. 15
- D. 20

63. Find the MEAN of these numbers: 10, 14, 18, 22, 16.

- A. 16
- B. 14
- C. 18

D. 20

64. What is the RANGE of this data set: 22, 15, 30, 8, 19, 25?

A. 15

B. 22

C. 25

D. 30

65. A bag contains 4 red, 6 blue, and 2 yellow marbles. What is the probability of drawing a YELLOW marble at random?

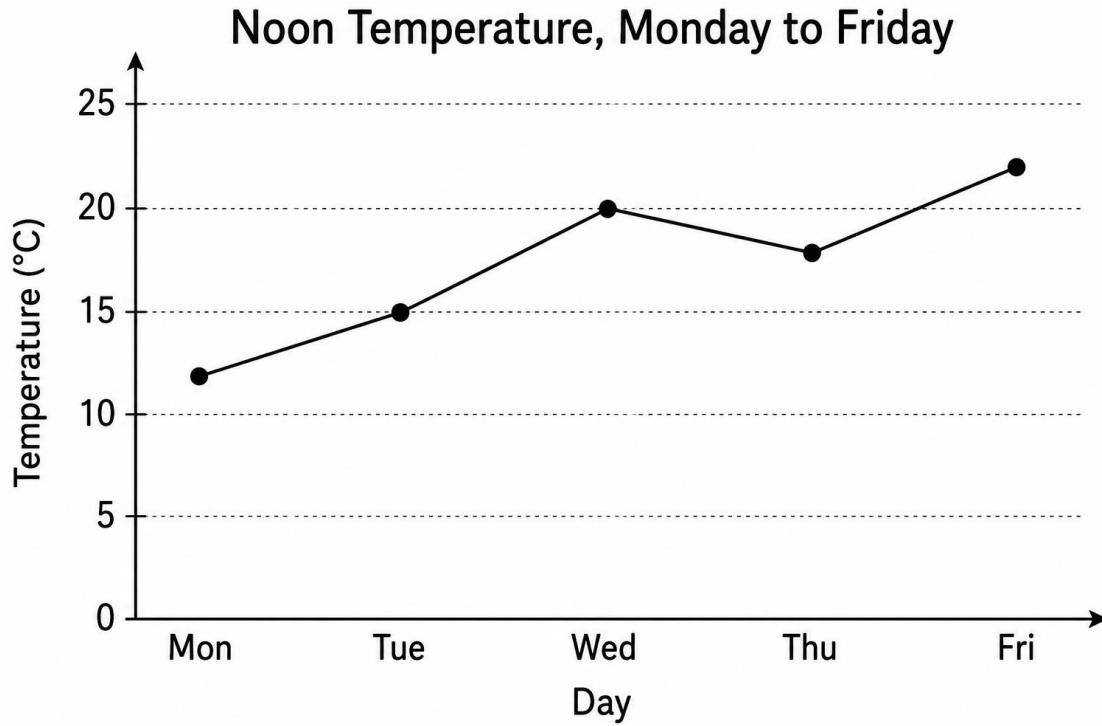
A. $\frac{4}{12}$

B. $\frac{6}{12}$

C. $\frac{1}{4}$

D. $\frac{2}{12}$

66. Look at the line graph below showing the temperature recorded at noon each day for five days.



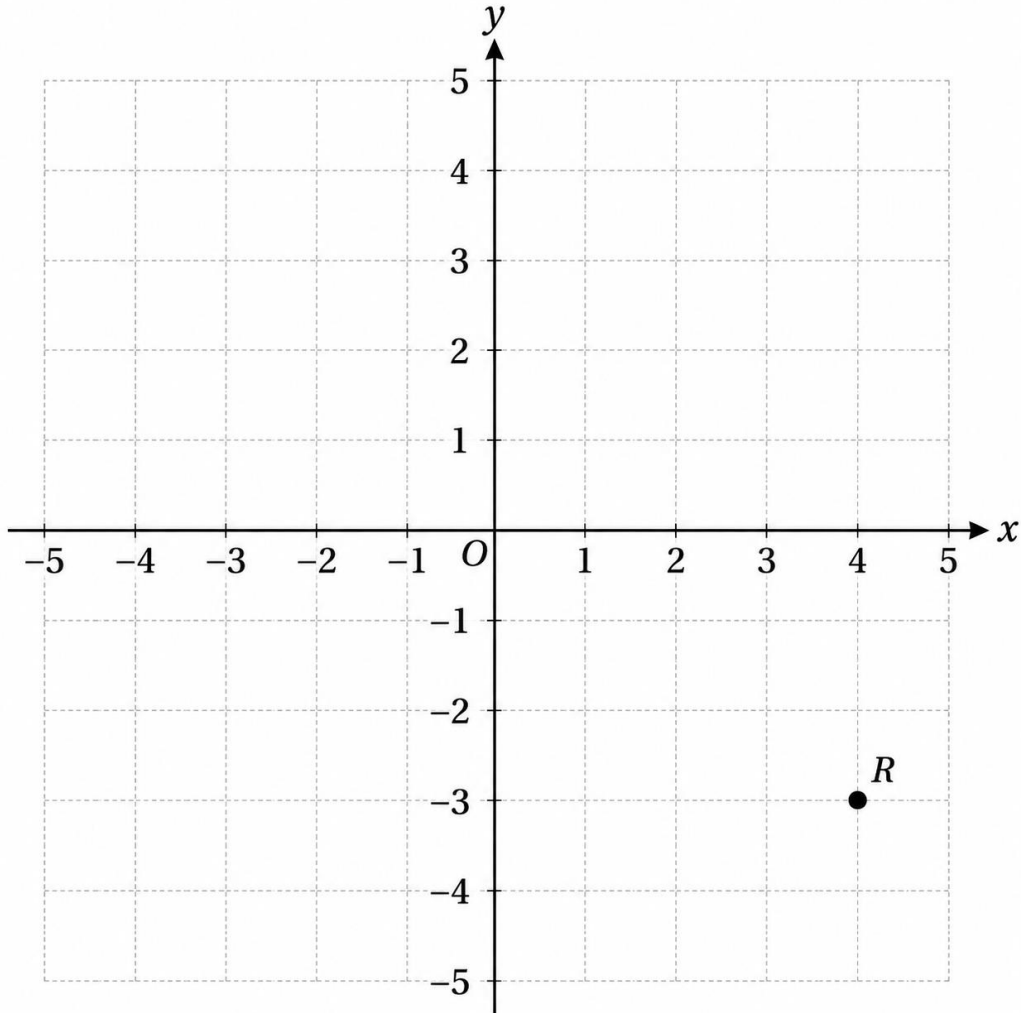
On which day was the temperature the HIGHEST?

- A. Monday
- B. Wednesday
- C. Friday
- D. Thursday

67. Find the MEDIAN of these scores: 6, 9, 4, 11, 7, 13.

- A. 7
- B. 8
- C. 9
- D. 11

68. Look at the coordinate plane below.



What are the coordinates of point R?

- A. (4, -3)
- B. (-3, 4)
- C. (-4, 3)
- D. (3, -4)

69. Two angles of a triangle measure 60° and 75° . What is the measure of the THIRD angle?

- A. 35°

- B. 25°
- C. 50°
- D. 45°

70. A cube has edges that measure 5 cm. What is its VOLUME?

- A. 25 cm^3
- B. 100 cm^3
- C. 125 cm^3
- D. 150 cm^3

71. How many grams are in 2.3 kilograms?

- A. 23 grams
- B. 2,300 grams
- C. 230 grams
- D. 23,000 grams

72. A point is located at $(-2, 5)$. It is translated 4 units RIGHT and 3 units DOWN. What are the coordinates of the new point?

- A. $(2, 2)$
- B. $(-6, 2)$
- C. $(2, 8)$
- D. $(-6, 8)$

73. A jacket originally costs \$80 and is on sale for 20% off. What is the SALE price of the jacket?

- A. \$16

- B. \$20
- C. \$64
- D. \$96

74. Maya earns \$40 each week from babysitting. She wants to save \$200. If she saves ALL of her babysitting money, how many weeks will it take her to reach her goal?

- A. 4 weeks
- B. 6 weeks
- C. 8 weeks
- D. 5 weeks

75. What does it mean to BUDGET your money?

- A. To spend all of your money on things you want as soon as you receive it
- B. To plan how you will spend and save your money based on what you have
- C. To borrow money from family members whenever you need extra cash
- D. To keep all of your money hidden in a piggy bank at home forever

ANSWER KEY & DETAILED EXPLANATIONS — SIMULATION EXAM 8

1. D — The opening paragraph states directly: "Eliana had practised in her bedroom mirror for two weeks. Every morning before school..." Both the duration and the morning routine are given together in the very first lines.

2. C — The narrator states: "The play was *The Lighthouse Keeper*." The title is named explicitly in the second paragraph of the passage.

3. A — The passage states: "the part she wanted was Marin — the keeper's daughter who spots the ship in the storm." Marin is identified both by name and by role in the story.

- 4. B** — The passage states: "Marin had eight lines." This direct-recall detail follows immediately after Marin's role is described.
- 5. D** — The passage states: "Eliana ate exactly half of her breakfast, then put on her sweater inside out without noticing." The inside-out sweater is the specific behavioural sign of her nervousness.
- 6. A** — The passage states: "Her father pointed it out at the bus stop and helped her fix it." The father at the bus stop is the one who notices the sweater.
- 7. C** — The passage states: "Mrs. Yoo, the drama teacher, was sitting at a folding table when Eliana arrived." Mrs. Yoo is named explicitly as the drama teacher running the audition.
- 8. B** — The passage states: "Five chairs faced the table, and three of them were already taken." Three taken chairs is the direct-recall detail.
- 9. A** — The passage states: "The first student was Owen. He spoke too fast and forgot one of the lines, but he laughed about it and kept going." Owen is identified by name and matching characteristic.
- 10. D** — In context, the "fluttering" grows into "a drumbeat in her ears" by the time she stands in front of the table. This sensation building from a light flutter to a heavy beat captures the physical experience of nervous anticipation.
- 11. C** — Eliana does not know whether she got the part, yet the story closes by emphasizing what she did do: "She had walked to the tape. She had stood in front of the table. She had said her lines all the way through." The accomplishment lies in the doing, not in the outcome.
- 12. OPEN-RESPONSE** — A strong Code 40 response identifies the shift from nervousness to focus: her quiet, soft first line; her steadier second line; the moment by the fourth line when she "had stopped thinking about her hands or her feet"; and her final immersion in the role as Marin. Code 40 responses cite specific moments from the passage and explain how each step shows the change.
- 13. C** — The opening paragraph defines tides as the rising and falling of the sea, and the second paragraph states directly that "Tides are caused mostly by the gravity of the Moon." Together they form the central main idea developed throughout the passage.
- 14. A** — The passage states directly: "Tides are caused mostly by the gravity of the Moon." Wind, rotation, and melting ice are not given in the passage as causes of tides.
- 15. B** — The passage states: "there are actually two high tides happening at the same time on opposite sides of Earth — and two low tides in between." Two high tides per day, on opposite sides of Earth, is the specific detail given.
- 16. D** — The passage states: "When the Sun, Earth, and Moon line up... their combined pull creates extra-high tides called spring tides." The name has nothing to do with the spring season; it refers to the extra-high tides caused by the alignment.

17. C — The passage states: "The Sun pulls on the oceans too, but because it is so far away, its effect is smaller — about half as strong as the Moon's." Distance is the explicit reason given for the Sun's smaller effect.

18. OPEN-RESPONSE — A strong Code 40 response explains the Moon's gravity tugging on Earth's oceans, with details such as: the side facing the Moon bulges toward it (creating a high tide); the side facing away from the Moon also bulges (creating a second high tide); the Earth's spin causes coasts to pass through these bulges twice each day; and the cycle takes about 24 hours plus 50 minutes because the Moon also moves in its orbit. Code 40 responses cite at least two of these details.

19. A — Proper nouns require capital letters: cities (Toronto, Montreal), named highways (Highway 401), and days of the week (Tuesday). Common nouns like "uncle" remain lowercase unless used as a name. Option A capitalizes only the proper nouns.

20. D — A collective noun like "team" is treated as singular and takes a singular verb. Option D pairs "The team... presents its findings" correctly. The other options pair singular subjects (group, each, neither/nor + closest subject) with the wrong verb form.

21. B — A pronoun must clearly refer to one specific antecedent. Option B repeats "Sarah" so the later pronoun "her" can only refer to Maria. The other options leave "she" or "her" ambiguous between two possible antecedents.

22. C — "Children" is already the plural form of "child." To show possession by more than one child, add an apostrophe and s to the irregular plural: children's. The other options misplace the apostrophe or omit it altogether.

23. D — A dependent clause has a subject and a verb but cannot stand alone as a complete sentence because of a subordinating word like "after," "because," or "when." Option D, "After the heavy storm finally passed in the early hours of dawn," meets this definition. Option C contains a dependent clause but is a complete complex sentence overall.

24. B — A comma splice occurs when two independent clauses are joined only by a comma, with no coordinating conjunction. Option B joins "The rain was heavy" and "the parade continued down the street" with only a comma, creating the splice. The other options use a subordinator, a semicolon, or comma + conjunction correctly.

25. A — A topic sentence introduces the main idea of a paragraph in a way that previews what the supporting sentences will develop. Option A names the topic (Grade 6 students, exercise) and the angle (healthy, focused, ready to learn). The other options are specific examples that would serve as supporting details.

26. C — Concrete language uses specific nouns and vivid details that the reader can see, taste, or feel. Option C names the dish (grilled salmon) and describes it (drizzled with lemon butter), creating a clear image. The other options use vague, general words like "food," "dinner," "good," and "nice."

27. B — An interrogative sentence asks a question and ends with a question mark. Option B opens with the helping verb "Have" and ends with a question mark, fitting that structure. Option A is imperative, C is declarative, and D is exclamatory.

28. D — Standard English uses only one negative word at a time. Option D pairs "did not" with "any," which is the correct single-negative form. The other options stack two negatives (don't + no, doesn't + never, can't + hardly), which is grammatically incorrect in standard usage.

29. B — When two or more words act together as a single adjective before a noun, they are joined with hyphens. "Five-year-old" describes the noun "child," so all three words are hyphenated. Without the hyphens or with only one, the phrase loses its adjective function.

30. C — The standard order for English adjectives is opinion, size, age, shape, color, origin, and material. "Small" (size), "brown" (color), and "wooden" (material) appear in that exact order in option C. The other options break the conventional order.

31. OPEN-RESPONSE — A strong Code 30 or 40 response names one specific visitor, gives concrete reasons for the choice, and explains at least two specific things the class could learn. The strongest responses move beyond "because they are famous" to identify particular skills, experiences, or perspectives the visitor would share.

32. A — In 583,914, the digit 8 sits in the ten thousands place. Its value is $8 \times 10,000 = 80,000$. Place value increases by a factor of ten with each position to the left.

33. D — Split one factor to use easier numbers: $73 \times 10 = 730$ and $73 \times 6 = 438$. Add the partial products: $730 + 438 = 1,168$. Splitting one factor into tens and ones is a reliable mental-math approach.

34. C — Convert to a common denominator to compare: $3/4 = 6/8$ and $7/8$ stays as $7/8$. Since $7/8 > 6/8$, the fraction $7/8$ is greater than $3/4$. The other options are all less than $3/4$ when compared this way.

35. B — To round 6,847 to the nearest hundred, look at the tens digit. The tens digit is 4, which is less than 5, so round down. The hundreds digit stays at 8 and the tens and ones become zero, giving 6,800.

36. D — Convert the percent to a decimal and multiply: $15\% = 0.15$, then $0.15 \times 200 = 30$. As a check, 10% of 200 is 20, and 15% must be a bit more — exactly half again, or 30.

37. A — Align the decimals before subtracting: $7.20 - 3.85 = 3.35$. Writing 7.2 as 7.20 makes the place-value columns line up cleanly for borrowing.

38. C — One-third of 24 is found by dividing: $24 \div 3 = 8$. So Maya gives away 8 stickers. Finding a unit fraction of a whole uses division by the denominator.

39. D — Substitute $x = 4$ into the expression $5x + 2$: $5(4) + 2 = 20 + 2 = 22$. Order of operations requires multiplication before addition.

- 40. B** — To isolate n , add 7 to both sides: $n = 12 + 7 = 19$. The inverse operation undoes the subtraction to keep the equation balanced.
- 41. A** — The pattern decreases by 10 each time: $80 \rightarrow 70 \rightarrow 60 \rightarrow 50 \rightarrow 40$, with a constant difference of -10 . The rule is "start at 80 and subtract 10 each time." A constant difference identifies the rule as additive (subtraction), not multiplicative.
- 42. C** — Test the equation $y = 3n + 4$ against each row: $3(1) + 4 = 7 \checkmark$, $3(2) + 4 = 10 \checkmark$, $3(3) + 4 = 13 \checkmark$, $3(4) + 4 = 16 \checkmark$. The equation matches every row of the table.
- 43. B** — The mode is the value that appears most often in a data set. The number 8 appears three times — more than any other value — making it the mode.
- 44. C** — Ben's bar reaches 10 books and Cara's bar reaches 4 books. The difference is $10 - 4 = 6$ books. Subtraction finds how many more one group has than another.
- 45. A** — The spinner has 3 red sections out of 8 equal sections in total. The probability of landing on red is $3/8$. Probability of an event equals favourable outcomes divided by total outcomes.
- 46. D** — A regular hexagon has 6 equal sides. Perimeter = number of sides \times side length = $6 \times 7 = 42$ cm. For any regular polygon, the perimeter equals the number of sides times one side length.
- 47. B** — Area of a square = side \times side = $6 \times 6 = 36$ m². Because all four sides of a square are equal, the area formula simplifies to side squared.
- 48. A** — An angle that measures exactly 90° is called a right angle. Acute angles are less than 90° , obtuse angles are between 90° and 180° , and straight angles equal exactly 180° .
- 49. D** — A triangular prism has two triangular faces and three rectangular faces. Each triangular face contributes 3 vertices, giving $3 \times 2 = 6$ vertices in total — one at each corner of the prism.
- 50. B** — Add the two amounts: $\$5.75 + \$2.50 = \$8.25$. Aligning the decimal points keeps the dollar and cent columns properly aligned for addition.
- 51. A** — Divide 936 by 8: $8 \times 100 = 800$, and $936 - 800 = 136$. Then $8 \times 17 = 136$. Together, $100 + 17 = 117$. As a check, $8 \times 117 = 936$.
- 52. C** — Rewrite $1/2$ with the common denominator 4: $1/2 = 2/4$. Then $2/4 + 1/4 = 3/4$. Fractions can be added only after their denominators match.
- 53. D** — Multiply the digits, then place the decimal: $4 \times 7 = 28$, and 0.4 has one decimal place, so the answer has one decimal place: 2.8. The number of decimal places in the answer matches the total in the factors.

- 54. B** — Align decimal places to compare: $0.45 = 0.450$, $0.045 = 0.045$, $0.405 = 0.405$, $0.5 = 0.500$. The smallest value is 0.045, which has zero tenths. Aligning place values prevents the common error of judging by digit length.
- 55. A** — A percent is written as a decimal by dividing by 100, or moving the decimal point two places to the left: $75\% = 75/100 = 0.75$. The other options misplace the decimal point.
- 56. C** — Add the two expenses: $\$18 + \$12 = \$30$. Subtract from the starting amount: $\$50 - \$30 = \$20$. Combining the expenses before subtracting reduces the chance of arithmetic error.
- 57. B** — Divide 17 by 5: $17 \div 5 = 3$ remainder 2, which becomes $3 \frac{2}{5}$ as a mixed number. The quotient is the whole-number part and the remainder becomes the new numerator over the original denominator.
- 58. D** — To isolate x , multiply both sides by 4: $x = 9 \times 4 = 36$. The inverse operation undoes the division while keeping the equation balanced.
- 59. A** — "A number n " gives the variable n ; "decreased by 6" means subtract 6. Together they form $n - 6$. The order matters: $6 - n$ would mean "6 decreased by a number n ," which is a different expression.
- 60. D** — Substitute $n = 6$ into $y = 2n + 3$: $y = 2(6) + 3 = 12 + 3 = 15$. Order of operations requires multiplication before addition.
- 61. C** — The inequality $x > 8$ is true when x is any value greater than 8. Among the options, only 12 is greater than 8. The value 8 itself does not satisfy $x > 8$ because it is equal to, not greater than, 8.
- 62. B** — Trace through the loop, adding each number from 2 to 5 to the running total: $0 + 2 = 2$, $2 + 3 = 5$, $5 + 4 = 9$, $9 + 5 = 14$. The final displayed value is 14.
- 63. A** — Add the five values: $10 + 14 + 18 + 22 + 16 = 80$. Divide by the number of values: $80 \div 5 = 16$. The mean is the total divided by the count.
- 64. B** — Range equals the largest value minus the smallest value. The largest is 30 and the smallest is 8, so the range is $30 - 8 = 22$.
- 65. D** — Total marbles = $4 + 6 + 2 = 12$. Favourable outcomes (yellow) = 2, so the probability of drawing yellow = $2/12$, which simplifies to $1/6$ but is expressed in favourable-over-total form in the answer choices.
- 66. C** — Reading the line graph, the highest point sits at Friday with a value of 22°C . The other days are Mon = 12, Tue = 15, Wed = 20, and Thu = 18 — all lower than Friday's value.
- 67. B** — Arrange the scores in order: 4, 6, 7, 9, 11, 13. For an even number of values, the median is the average of the two middle numbers: $(7 + 9) \div 2 = 8$.
- 68. A** — Point R sits 4 units to the right of the y -axis ($x = 4$) and 3 units below the x -axis ($y = -3$), giving the coordinates (4, -3). Coordinates are always written in the order (x , y).

69. D — The interior angles of a triangle sum to 180° . Subtract the two known angles: $180^\circ - 60^\circ - 75^\circ = 45^\circ$. This rule holds regardless of triangle type.

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

71. B — Since 1 kilogram equals 1,000 grams, multiply by 1,000 to convert: $2.3 \times 1,000 = 2,300 \text{ g}$. Moving from a larger unit to a smaller unit requires multiplication.

72. A — Translating 4 units right adds 4 to the x-coordinate; translating 3 units down subtracts 3 from the y-coordinate. Applied to $(-2, 5)$: $(-2 + 4, 5 - 3) = (2, 2)$.

73. C — First find the discount: 20% of $\$80 = 0.20 \times \$80 = \$16$. Subtract the discount from the original price: $\$80 - \$16 = \$64$. The sale price is what the customer pays after the discount is taken off.

74. D — Divide the savings goal by the weekly amount: $\$200 \div \$40 = 5$ weeks. This division converts a financial goal into a clear time frame.

75. B — A budget is a plan for how money will be spent and saved based on the income a person has. Budgeting helps people make sure they cover necessary expenses, save for goals, and avoid spending more than they have.