PRACTICE EXAM 6: EQAO GRADE 3 MATH SIMULATION (40 QUESTIONS)

STAGE 1 — Questions 1–10

1. A factory produced 487 toy cars on Monday and 256 toy cars on Tuesday. How many toy cars did the factory produce in total over the two days?

A. 231

B. 633

C. 643

D. 743

2. What number is shown in expanded form as 400 + 70 + 6?

A. 4,706

B. 476

C. 4,076

D. 467

3. Round the number 537 to the nearest hundred.

A. 500

B. 540

C. 530

D. 600

4. A pizza is cut into 12 equal slices. If Diego ate 4 slices, what fraction of the pizza did Diego eat?

A. 12/4

B. 4/8

C. 4/12

D. 8/12

5. Sienna buys an ice cream cone for $3.25 and a bottle of water for $1.50. She pays with a $10 bill. How much change should Sienna receive?

A. $4.75

B. $5.25

C. $4.25

D. $5.75

6. Skip count by 5s starting from 35. What is the sixth number you say?

A. 65

B. 60

C. 70

D. 55

7. A school library had 605 books. Students borrowed 287 books over the month. How many books are left on the shelves?

A. 482

B. 422

C. 882

D. 318

8. Which expression has the same value as 4×7?

A. $4 + 7$

B. $7 - 4$

C. 28

D. 47

9. Maya has 18 candies. She wants to share them equally with her 5 cousins, so that all 6 children get the same number. How many candies does each child receive?

A. 3 candies

B. 6 candies

C. 4 candies

D. 18 candies

10. Which fraction is equivalent to 3/4?

A. 3/8

B. 6/8

C. 4/3

D. 3/12

STAGE 2 — Questions 11–20

11. Compare the two expressions. Which symbol makes the statement true?

250 + 300 ___ 4 × 100

A.

B. =

C. >

D. ≠ and >

12. Marcus has 5 toonies, 3 loonies, and 6 dimes in his wallet. How much money does Marcus have in total?

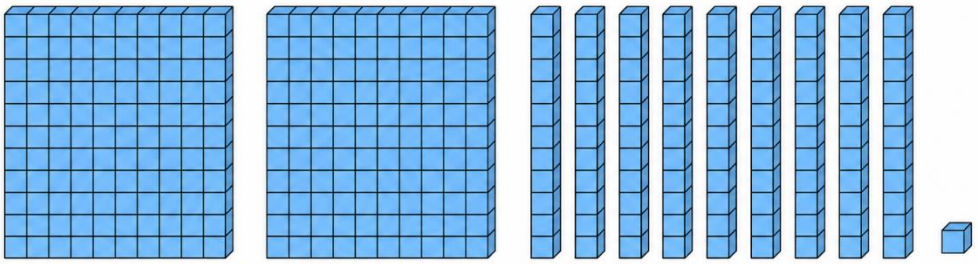
A. $13.60

B. $13.50

C. $14.60

D. $14.50

13. Look at the base-ten blocks below. What number do they represent?



A. 192

B. 219

C. 291

D. 912

14. What is 80 ÷ 10?

A. 70

B. 8

C. 800

D. 90

15. Find the missing number in the pattern: 36, 32, 28, ___ , 20, 16.

A. 22

B. 26

C. 30

D. 24

16. What is the rule for this pattern: 6, 12, 18, 24, 30, 36 ?

A. Start at 6 and add 5 each time

B. Start at 6 and multiply by 2 each time

C. Start at 6 and add 6 each time

D. Start at 6 and subtract 6 each time

17. Solve for n in the equation: $5 \times n = 45$.

A. 9

B. 50

C. 8

D. 40

18. A robot starts at 4. It follows this code:

REPEAT 3 TIMES:

Step 1: Add 5.

Step 2: Add 1.

What is the final value?

A. 18

B. 22

C. 24

D. 26

19. Which equation is FALSE?

A. $8 + 4 = 4 + 8$

B. $12 - 5 = 5 + 2$

C. $6 \times 3 = 9 + 9$

D. 7 × 2 = 7 + 2

20. A school is ordering shirts for 95 students for a sports day. Shirts come in packs of 10. How many packs does the school need to buy?

A. 9 packs

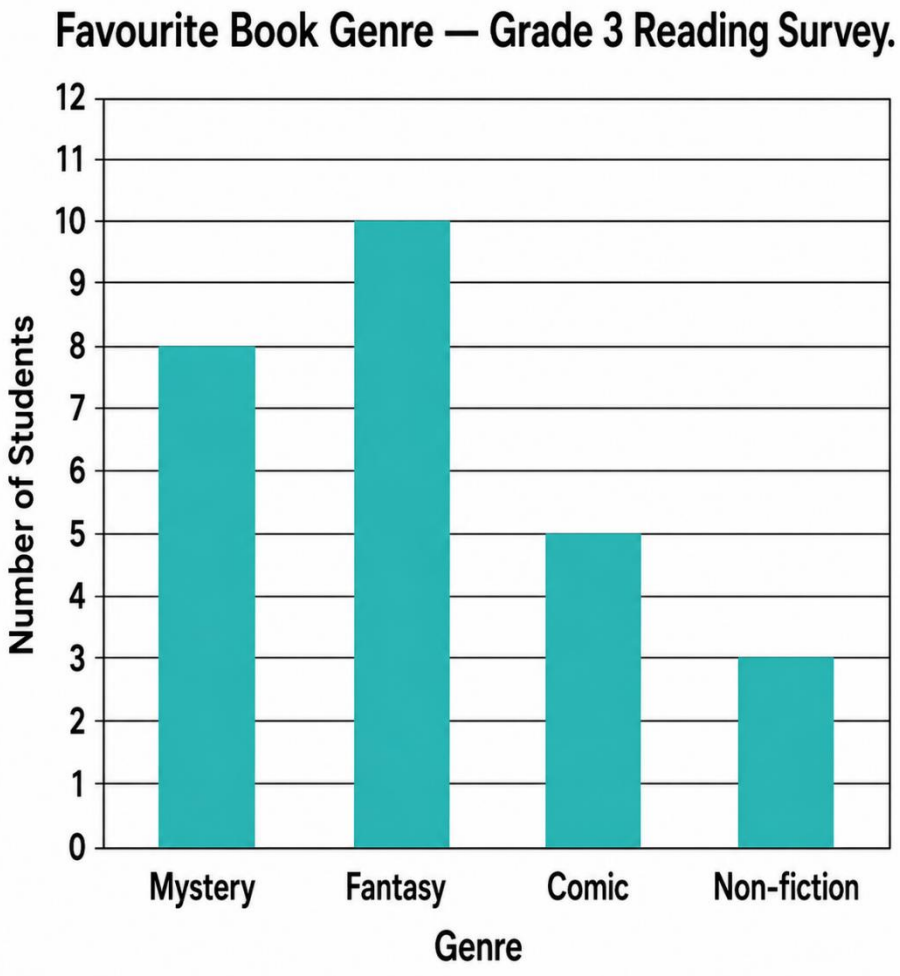
B. 95 packs

C. 10 packs

D. 8 packs

STAGE 3 — Questions 21–30

21. Look at the bar graph below. Which book genre received exactly 5 votes?



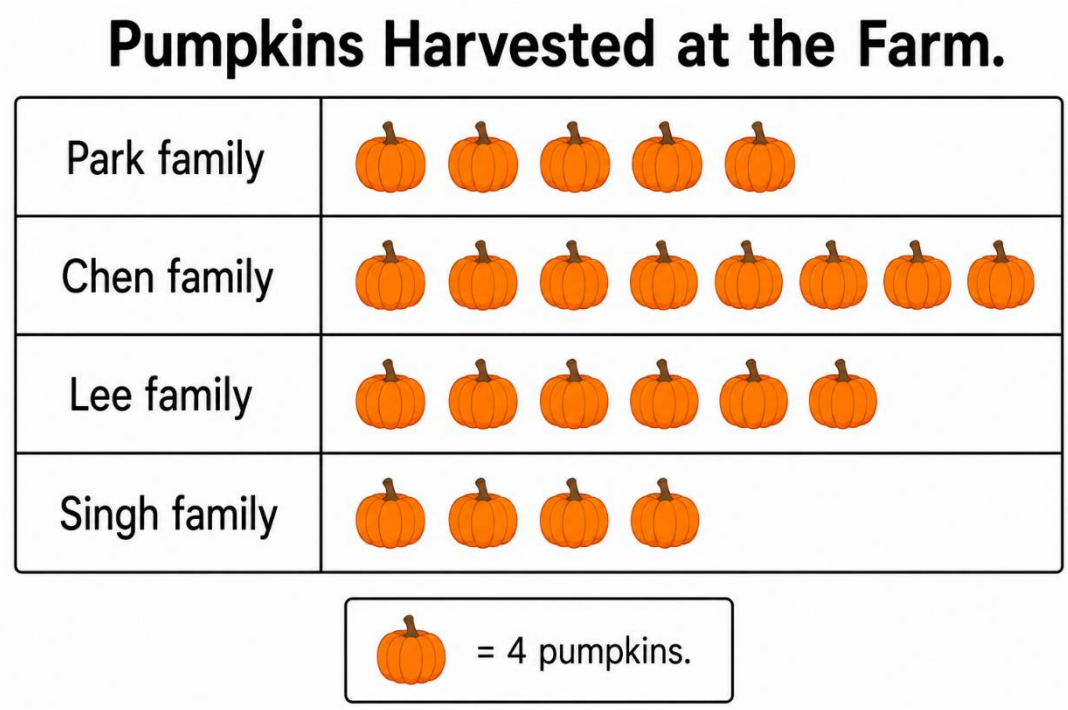
A. Mystery

B. Non-fiction

C. Comic

D. Fantasy

22. Look at the pictograph below. Each pumpkin icon stands for 4 pumpkins harvested. How many pumpkins did the Lee family harvest?



A. 24 pumpkins

B. 6 pumpkins

C. 18 pumpkins

D. 28 pumpkins

23. Find the mean of this data set: 8, 11, 5, 9, 12.

A. 11

B. 12

C. 5

D. 9

24. Find the mode of this data set: 13, 7, 9, 13, 5, 13, 7, 13.

A. 7

B. 13

C. 9

D. 5

25. A spinner is divided into 8 equal sections. 6 sections are blue and 2 sections are red. Landing on blue is:

A. Impossible

B. Equally likely to landing on red

C. Likely

D. Certain

26. Look at the frequency table below. How many students were surveyed in total?

Favourite Weekend Activity

Activity	Number of Students
Park	12
Movies	8
Sports	10
Reading	5
Total	

A. 35 students

B. 30 students

C. 25 students

D. 40 students

27. A bag contains only blue marbles. Drawing a green marble from this bag is:

A. Certain

B. Likely

C. Equally likely

D. Impossible

28. Look at the bar graph from Figure PQ-2 again. How many students chose either mystery or fantasy as their favourite genre?

A. 10 students

B. 18 students

C. 13 students

D. 8 students

29. The table below shows the number of laps each student ran during gym class. What is the total number of laps run by all 5 students?

Laps Run During Gym Class.

Student	Laps
Aiden	7
Bea	9
Charlie	4
Dani	11
Eli	6

A. 37 laps

B. 40 laps

C. 36 laps

D. 47 laps

30. A meteorologist predicts that the temperature in Toronto tomorrow will be above 0°C in the month of August. This event is:

A. Impossible

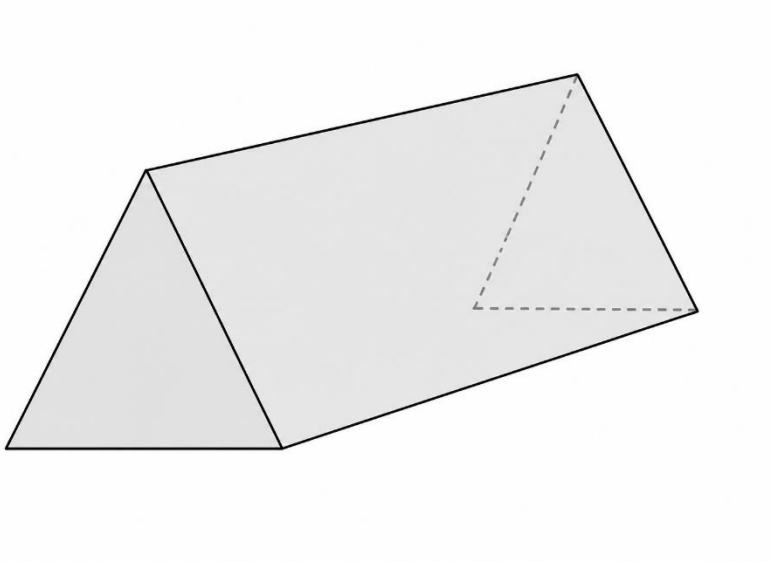
B. Unlikely

C. Certain

D. Equally likely

STAGE 4 — Questions 31–40

31. Look at the 3D shape below. How many edges does it have?



A. 6 edges

B. 5 edges

C. 12 edges

D. 9 edges

32. Which 3D shape has 1 flat circular base and 1 vertex at the top where a curved surface narrows to a point?

A. Cylinder

B. Cone

C. Sphere

D. Square pyramid

33. A character is facing east. The character makes one quarter-turn to the left. Which direction is the character facing now?

A. North

B. West

C. South

D. East

34. A rectangle has a length of 14 cm and a width of 6 cm. What is its perimeter?

A. 20 cm

B. 84 cm

C. 40 cm

D. 50 cm

35. Which unit is best for measuring the distance between two cities?

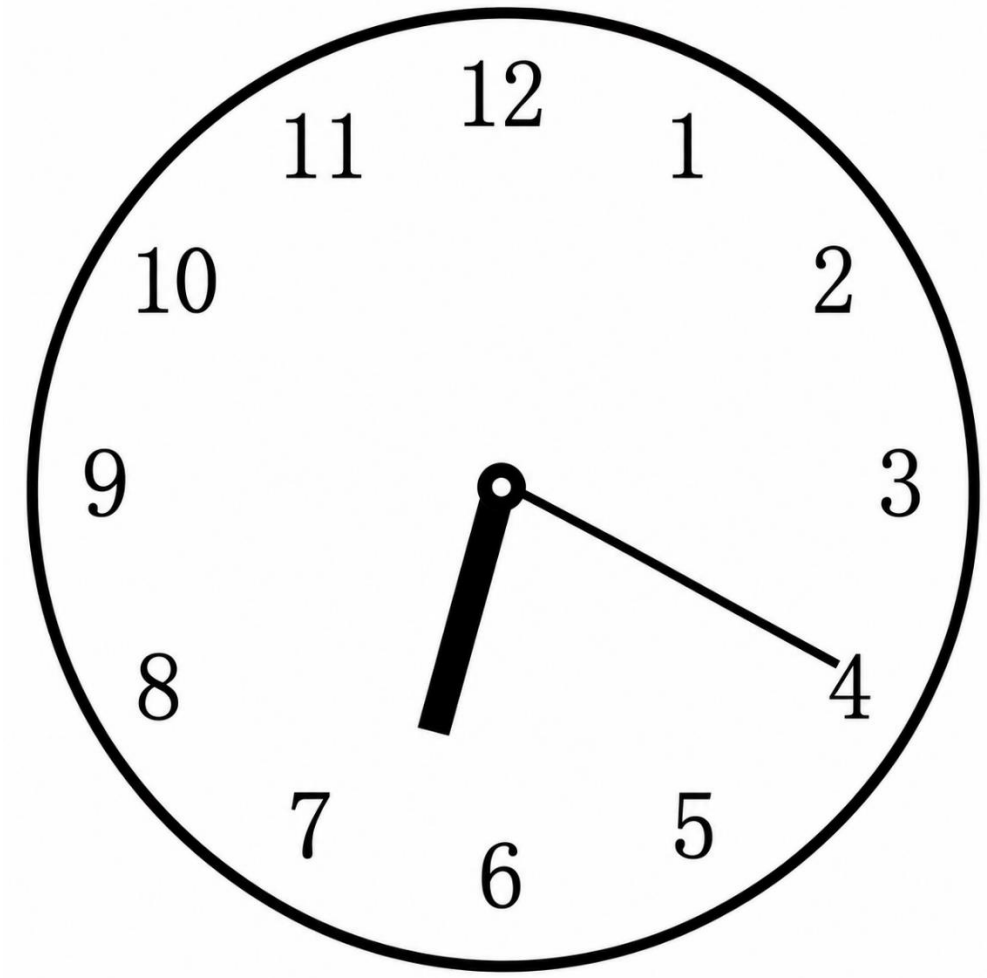
A. Centimetres

B. Kilometres

C. Metres

D. Millimetres

36. Look at the analog clock below. What time is shown?



A. 4:30

B. 6:04

C. 7:20

D. 6:20

37. A library reading session begins at 10:35 AM and ends at 11:50 AM. How long is the reading session?

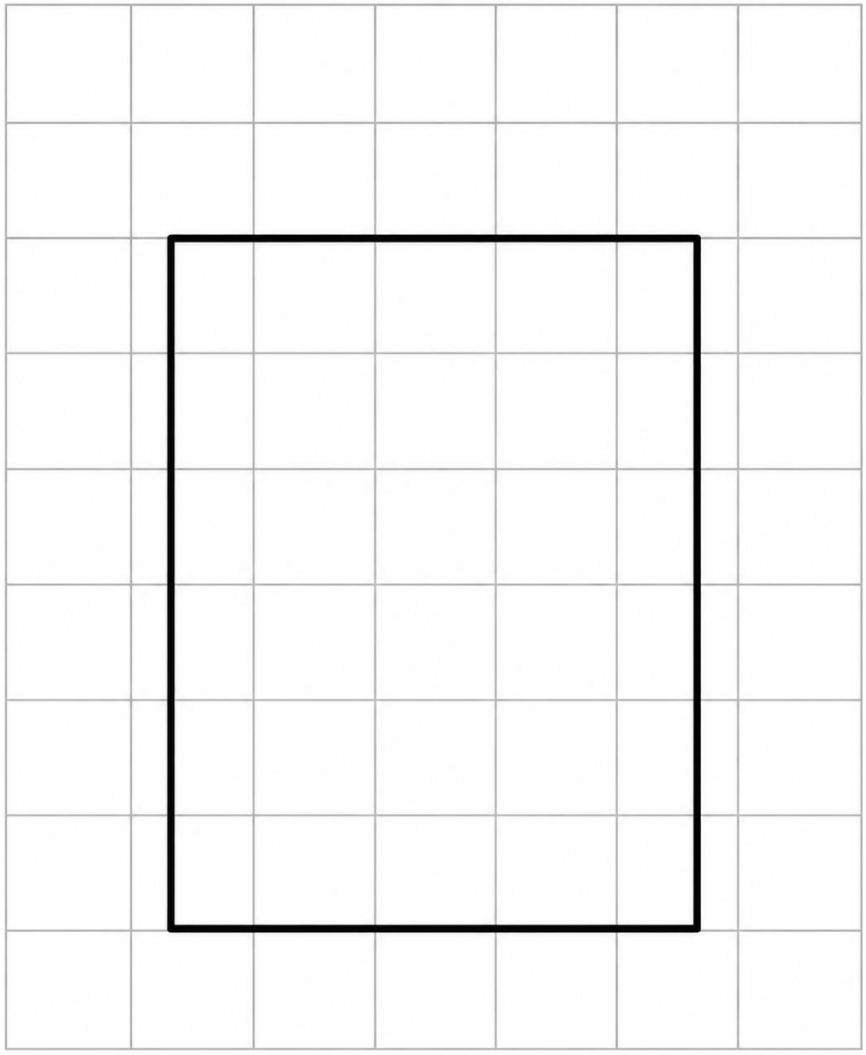
A. 1 hour 15 minutes

B. 1 hour 25 minutes

C. 45 minutes

D. 2 hours

38. Look at the rectangle drawn on the grid below. What is its area?



A. 11 square centimetres

B. 22 square centimetres

C. 30 square centimetres

D. 36 square centimetres

39. A water bottle holds 1.5 litres of water. How many millilitres is that?

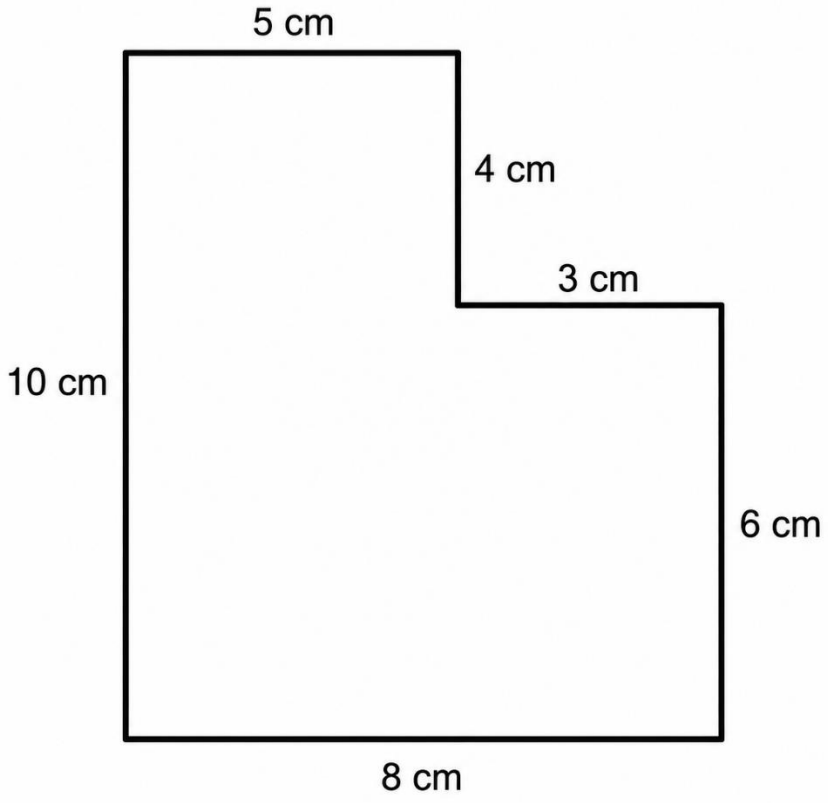
A. 150 mL

B. 15 mL

C. 15,000 mL

D. 1,500 mL

40. Look at the irregular shape below. What is its perimeter?



A. 28 cm

B. 36 cm

C. 30 cm

D. 32 cm

Practice Exam 6: Answer Key and Explanations

1. D — 743. Add the two daily totals using the standard algorithm: 487 + 256 = 743. Ones: 7 + 6 = 13 (write 3, carry 1). Tens: 1 + 8 + 5 = 14 (write 4, carry 1). Hundreds: 1 + 4 + 2 = 7. Estimation check: 490 + 260 = 750, close to 743. This tests addition with regrouping in two places (curriculum expectation B2.5).

2. B — 476. Expanded form 400 + 70 + 6 represents 4 hundreds + 7 tens + 6 ones, which combines to 476. Read place-value parts left to right: the hundreds (400), the tens (70), and the ones (6). Translating between expanded and standard form is a core place-value skill from Chapter 1.1.

3. A — 500. To round 537 to the nearest hundred, look at the digit in the tens place: 3. Since 3 is less than 5, round down. The number 537 rounds down to 500. The midpoint between 500 and 600 is 550, and 537 is before that midpoint — confirming the rounding decision (Chapter 1.5).

4. C — 4/12. The pizza has 12 equal slices (denominator = 12) and Diego ate 4 of them (numerator = 4). The fraction representing what he ate is 4/12, read "four twelfths." Always identify the total parts (denominator) and the counted parts (numerator) carefully (Chapter 2.1).

5. B — $5.25. First find the total cost: $3.25 + $1.50 = $4.75. Then find the change: $10.00 − $4.75 = $5.25. Multi-item transactions always require adding the prices first, then subtracting from the payment (Chapter 5.4). Estimation check: $10 − $5 = $5, close to $5.25.

6. A — 65. Skip count by 5s starting from 35: 35 is the start, then 40 (1st), 45 (2nd), 50 (3rd), 55 (4th), 60 (5th), 65 (6th). The sixth number said after 35 is 65. Always count carefully — the starting number is not counted as a "number said," only the numbers that follow (Chapter 1.6).

7. D — 318. Subtract using the standard algorithm: 605 − 287 = 318. Ones: 5 < 7, regroup. Tens is 0, so first regroup from hundreds. 6 becomes 5 hundreds, 0 becomes 10 tens, then 10 tens becomes 9 tens and ones becomes 15. Now: 15 − 7 = 8, 9 − 8 = 1, 5 − 2 = 3. Regrouping across a zero is a critical skill (Chapter 3.3).

8. C — 28. Multiplication 4 × 7 means "four groups of seven" or "seven groups of four," and equals 28. Skip counting by 4s seven times: 4, 8, 12, 16, 20, 24, 28. The other options (4 + 7 = 11; 7 − 4 = 3; 47 as a number) all produce different values (Chapter 4.1).

9. A — 3 candies. Maya and her 5 cousins together make 6 children sharing 18 candies equally. Division: 18 ÷ 6 = 3 candies each. Read the problem carefully — "shares with her 5 cousins, so that all 6 children get the same number" confirms 6 sharers, not 5. This is a fair-share problem (Chapter 2.2).

10. B — 6/8. The halves family of equivalent fractions: 3/4 = 6/8. Splitting each fourth into two smaller equal pieces produces eighths, and 6 of those eighths equal 3/4. The other options (3/8, 4/3, 3/12) all represent different amounts. Equivalent fractions name the same amount in different forms (Chapter 2.3).

11. D —The correct answer is D. Compute both sides: 250 + 300 = 550 and 4 × 100 = 400. Since 550 ≠ 400 and 550 > 400, both conditions in option D are satisfied, making it the most complete comparison. Option A (<) is incorrect because 550 is not less than 400. Option B (=) is incorrect because the two expressions have different values. Option C (>) is true but incomplete, as it identifies only one relationship between the values rather than fully characterizing the comparison.

12. A — $13.60. Add Marcus's money: 5 toonies = $10.00; 3 loonies = $3.00; 6 dimes = $0.60. Total: $10.00 + $3.00 + $0.60 = $13.60. Sort coins from largest to smallest denomination before adding to reduce counting errors (Chapter 5.2).

13. C — 291. Count the base-ten blocks: 2 hundred-flats = 200; 9 ten-rods = 90; 1 unit-cube = 1. Total: 200 + 90 + 1 = 291.

14. B — 8. Division 80 ÷ 10 asks "10 times what equals 80?" From the 10 times table: 10 × 8 = 80, so 80 ÷ 10 = 8. The 10 times table shortcut works in reverse for division — removing a trailing zero from the dividend gives the quotient (Chapter 4.2).

15. D — 24. The pattern decreases by 4 each step: 36, 32, 28, 24, 20, 16. To verify: 32 − 28 = 4, 28 − 24 = 4, all consistent. The missing term between 28 and 20 is 28 − 4 = 24. This is a shrinking pattern with constant negative growth (Chapter 6.2).

16. C — Start at 6 and add 6 each time. The pattern values are 6, 12, 18, 24, 30, 36 — each term is 6 more than the previous (the 6 times table). Differences: 12 − 6 = 6, 18 − 12 = 6, all consistent. A complete pattern rule names both the starting value and the operation (Chapter 6.3).

17. A — 9. Solve 5 × n = 45 by thinking: "5 times what equals 45?" From the 5 times table: 5 × 9 = 45, so n = 9. Check by substituting: 5 × 9 = 45 ✓. Either think of the multiplication fact or use the inverse: n = 45 ÷ 5 = 9 (Chapter 7.4).

18. B — 22. Trace the code: the loop repeats 3 times, and each cycle adds 5 + 1 = 6. So 3 cycles add 3 × 6 = 18 to the starting value: 4 + 18 = 22. Verifying step by step: 4 → 9 → 10 → 15 → 16 → 21 → 22. Final value: 22 (Chapter 8.2).

19. D — 7 × 2 = 7 + 2. Compute both sides: 7 × 2 = 14 and 7 + 2 = 9. Since 14 ≠ 9, this equation is FALSE. The other options are all true: 8 + 4 = 12 = 4 + 8; 12 − 5 = 7 = 5 + 2; 6 × 3 = 18 = 9 + 9. Multiplication and addition produce very different results (Chapter 7.2).

20. C — 10 packs. Divide: 95 ÷ 10 = 9 with 5 left over. Nine packs provide only 90 shirts — not enough for 95 students. The school needs a tenth pack to cover the remaining 5 students. This is a mathematical modelling problem where the real-world answer requires rounding up (Chapter 8.4).

21. C — Comic. Read the bar graph values: Mystery = 8, Fantasy = 10, Comic = 5, Non-fiction = 3. The bar that reaches exactly 5 is Comic. Always trace from the top of each bar horizontally to the y-axis to read precise values (Chapter 9.5).

22. A — 24 pumpkins. Read the pictograph: the Lee family row has 6 pumpkin icons. The key states each icon = 4 pumpkins, so multiply: 6 × 4 = 24 pumpkins. Many-to-one correspondence means each picture represents more than one item — always check the key (Chapter 9.4).

23. D — 9. Add all values: 8 + 11 + 5 + 9 + 12 = 45. Divide by the number of values: 45 ÷ 5 = 9. The mean represents the typical or average value in the data set. Always count the number of values carefully before dividing the sum (Chapter 10.1).

24. B — 13. Count how many times each value appears: 13 appears 4 times; 7 appears 2 times; 9 and 5 each appear once. The value that appears most often is 13. The mode is the most frequent value, not the largest — careful counting determines the mode (Chapter 10.2).

25. C — Likely. The spinner has 6 blue sections out of 8 total sections. More than half the spinner is blue, so landing on blue is likely (probable but not certain). It would only be "certain" if all 8 sections were blue, and only "equally likely" if 4 sections were blue and 4 were red (Chapter 10.4).

26. A — 35 students. Add the frequencies for all four activities: 12 + 8 + 10 + 5 = 35 students. The total represents every student surveyed. Always verify by adding all rows in the frequency column carefully (Chapter 9.3).

27. D — Impossible. The bag contains only blue marbles — there are no green marbles to draw. So drawing a green marble cannot happen — it is impossible. "Impossible" describes events with zero chance of occurring (Chapter 10.4).

28. B — 18 students. Read the bar graph: Mystery = 8, Fantasy = 10. Add: 8 + 10 = 18 students. The phrase "either ... or" in this context means the total of both categories combined. This is a Level-2 graph-reading task from Chapter 10.3.

29. A — 37 laps. Add the laps for all 5 students: 7 + 9 + 4 + 11 + 6 = 37 laps. Verify sequentially: 7 + 9 = 16; 16 + 4 = 20; 20 + 11 = 31; 31 + 6 = 37. Multi-row table summations require careful sequential addition (Chapter 9.3).

30. C — Certain. Toronto temperatures in August are reliably well above 0°C throughout the entire month — typically 20°C or higher. There is no realistic possibility of temperatures at or below freezing in August. "Certain" describes events with 100% probability (Chapter 10.4).

31. D — 9 edges. A triangular prism has 9 edges total: 3 around the top triangular base, 3 around the bottom triangular base, and 3 vertical edges connecting the two bases. From the Chapter 11.2 reference table: triangular prism = 5 faces, 9 edges, 6 vertices.

32. B — Cone. A cone has 1 flat circular base and 1 curved surface that narrows to a single vertex (apex) at the top. A cylinder has 2 circular bases and a curved surface that doesn't narrow. A sphere has no flat bases. A square pyramid has a square (not circular) base (Chapter 11.1).

33. A — North. A quarter-turn rotates 90 degrees. Starting facing east and turning left by 90° rotates counter-clockwise to face north. The cardinal direction cycle counter-clockwise: East → North → West → South → East. Always check whether the turn is left or right (Chapter 12.3).

34. C — 40 cm. Perimeter of a rectangle = 2 × (length + width) = 2 × (14 + 6) = 2 × 20 = 40 cm. Or add all four sides: 14 + 6 + 14 + 6 = 40 cm. The shortcut formula is faster than adding all sides individually (Chapter 13.2).

35. B — Kilometres. Distances between cities are typically tens to hundreds of kilometres — firmly in the kilometre range. Centimetres and millimetres are far too small; metres would produce unwieldy numbers (e.g., 100,000 m between cities). Only kilometres is appropriate for inter-city distances (Chapter 13.1).

36. D — 6:20. The hour hand sits between the 6 and the 7, closer to the 6 — so the hour is 6 (the smaller of the two numbers it sits between). The minute hand points to the 4, which equals 20 minutes past the hour (4 × 5 = 20). The time is 6:20 (Chapter 14.1).

37. A — 1 hour 15 minutes. From 10:35 AM to 11:35 AM is 1 hour. From 11:35 AM to 11:50 AM is 15 minutes. Total elapsed time: 1 hour + 15 minutes = 1 hour 15 minutes. Break elapsed-time calculations into whole-hour portions plus the remaining minutes when crossing the hour boundary (Chapter 14.3).

38. C — 30 square centimetres. The rectangle is 5 cm wide and 6 cm tall. Area = length × width = 5 × 6 = 30 square centimetres. Or count the unit squares: 5 columns × 6 rows = 30 squares. Area is measured in square units (cm^2) (Chapter 14.5).

39. D — 1,500 mL. The relationship: 1 litre = 1,000 millilitres. So 1.5 litres = 1.5 × 1,000 = 1,500 mL. The other options (150, 15, 15,000) represent different amounts. Always apply the conversion factor 1,000 when moving between litres and millilitres (Chapter 13.4).

40. B — 36 cm. Add all six side lengths of the L-shape: 5 + 4 + 3 + 6 + 8 + 10 = 36 cm. Perimeter is the total distance around the outside of a shape, found by adding every side. For irregular shapes, no shortcut formula applies — always add side by side (Chapter 13.2).