PRACTICE EXAM 19: EQAO GRADE 3 MATH SIMULATION (40 QUESTIONS)

STAGE 1 — Questions 1–10

1. A bakery sold 247 muffins on Monday and 168 muffins on Tuesday. How many muffins did the bakery sell across both days?

A. 79

B. 415

C. 405

D. 425

2. What number is shown in expanded form as 800 + 30 + 7?

A. 8,307

B. 873

C. 837

D. 8,037

3. Round the number 658 to the nearest ten.

A. 600

B. 650

C. 700

D. 660

4. A pizza is cut into 4 equal slices. Anita ate 1 slice. What fraction of the pizza is left?

A. 3/4

B. 1/4

C. 4/4

D. 4/3

5. A school has 7 classrooms. Each classroom has 8 desks. How many desks are there in total?

A. 15 desks

B. 7 desks

C. 8 desks

D. 56 desks

6. Skip count by 7s starting from 21. What is the fifth number you say?

A. 49

B. 42

C. 56

D. 63

7. A library had 600 books. Students borrowed 247 books in one month. How many books are left in the library?

A. 353

B. 847

C. 363

D. 453

8. Which expression has the same value as 6×4?

A. $6 + 4$

B. $4 + 4 + 4 + 4 + 4 + 4$

C. 64

D. $6 + 6$

9. A summer camp has 32 campers. They are divided into equal groups of 4 for canoe lessons. How many groups are there?

A. 28 groups

B. 32 groups

C. 4 groups

D. 8 groups

10. Which fraction is equivalent to 1/4?

A. 2/8

B. 1/2

C. 4/1

D. 1/8

STAGE 2 — Questions 11–20

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

745 ___ 754

A. >

B. =

C.

D. ≥

12. Hiro has 4 toonies, 5 loonies, 2 quarters, and 4 dimes. How much money does Hiro have in total?

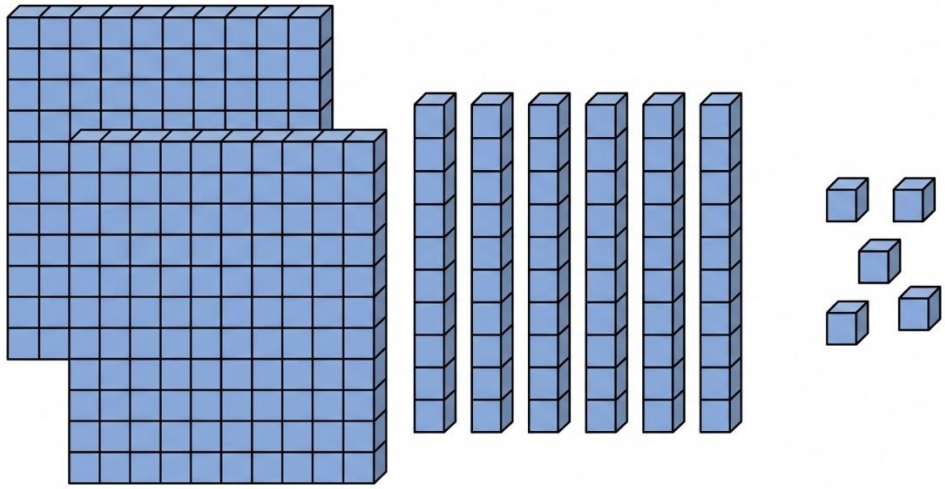
A. $14.40

B. $13.90

C. $13.40

D. $14.90

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



A. 275

B. 572

C. 257

D. 725

14. What is 24 ÷ 4?

A. 24

B. 4

C. 20

D. 6

15. Find the missing number in this pattern: 32, 28, 24, ___ , 16, 12.

A. 22

B. 20

C. 18

D. 26

16. What is the rule for this pattern: 9, 18, 27, 36, 45, 54 ?

A. Start at 9 and add 9 each time

B. Start at 9 and multiply by 2 each time

C. Start at 9 and add 18 each time

D. Start at 9 and subtract 9 each time

17. Solve for n in the equation: $7 \times n = 35$.

A. 28

B. 42

C. 5

D. 7

18. A robot starts at 24. It follows this code:

REPEAT 4 TIMES: Add 8.

What is the final value?

A. 32

B. 48

C. 40

D. 56

19. Which equation is TRUE?

A. $14 + 5 = 14 \times 5$

B. $6 \times 6 = 4 \times 9$

C. $20 \div 4 = 4 + 5$

D. $16 - 8 = 16 \div 8$

20. A classroom has 32 students. Each student gets 3 stickers as a reward. How many stickers does the teacher need in total?

A. 96 stickers

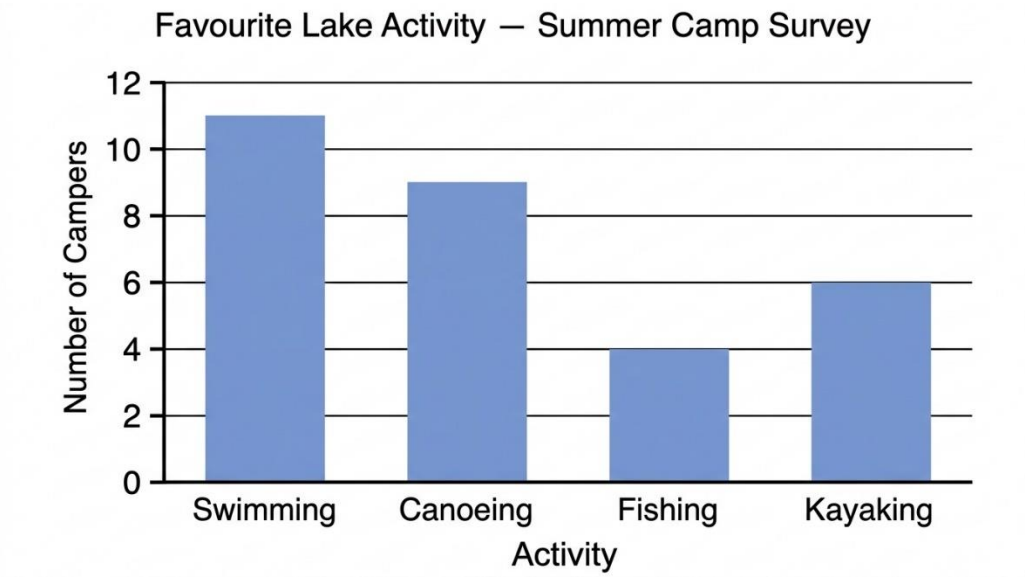
B. 35 stickers

C. 29 stickers

D. 12 stickers

STAGE 3 — Questions 21–30

21. Look at the bar graph below. Which lake activity received exactly 6 votes?



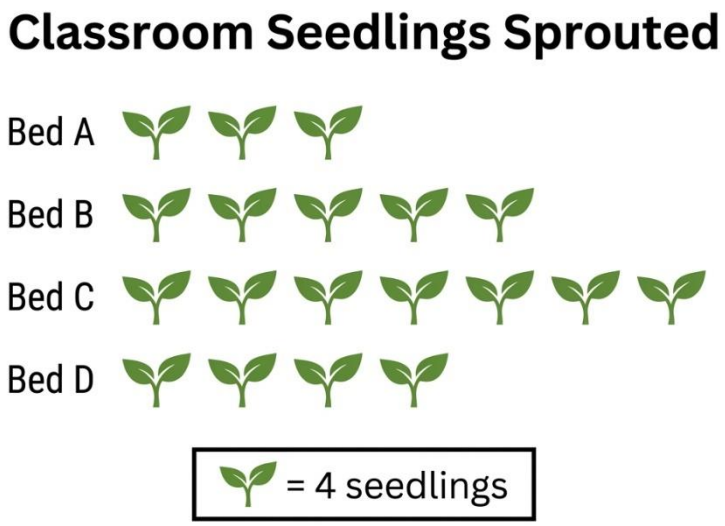
A. Swimming

B. Canoeing

C. Kayaking

D. Fishing

22. Look at the pictograph below. Each sprout icon stands for 4 seedlings sprouted. How many seedlings sprouted in Bed C?



A. 11 seedlings

B. 21 seedlings

C. 24 seedlings

D. 28 seedlings

23. Find the mean of this data set: 7, 11, 9, 13, 5.

A. 9

B. 11

C. 7

D. 13

24. Find the mode of this data set: 8, 12, 8, 6, 8, 14, 6, 8.

A. 6

B. 12

C. 8

D. 14

25. A spinner has 5 equal sections. 1 is red and 4 are blue. Landing on red is:

A. Likely

B. Certain

C. Impossible

D. Unlikely

26. Look at the frequency table below. Which sport was chosen by the fewest students?

Favourite School Sport	
Sport	**Number of Students**
Basketball	13
Volleyball	8
Badminton	5
Floor Hockey	11

A. Volleyball

B. Badminton

C. Floor Hockey

D. Basketball

27. A bag contains 9 strawberry candies and 1 lime candy. Drawing a strawberry candy is:

A. Likely

B. Impossible

C. Equally likely

D. Unlikely

28. Look at the bar graph in Figure PQ-2 again. How many more campers chose swimming than fishing?

A. 11 campers

B. 4 campers

C. 7 campers

D. 15 campers

29. The table below shows the number of snacks served at recess each day. What is the total number of snacks served across all 5 days?

Snacks Served at Recess

Day		Snacks Served
Monday		26
Tuesday		19
Wednesday		31
Thursday		22
Friday		27

A. 115 snacks

B. 130 snacks

C. 120 snacks

D. 125 snacks

30. A coin is flipped. The probability of landing on heads is:

A. Certain

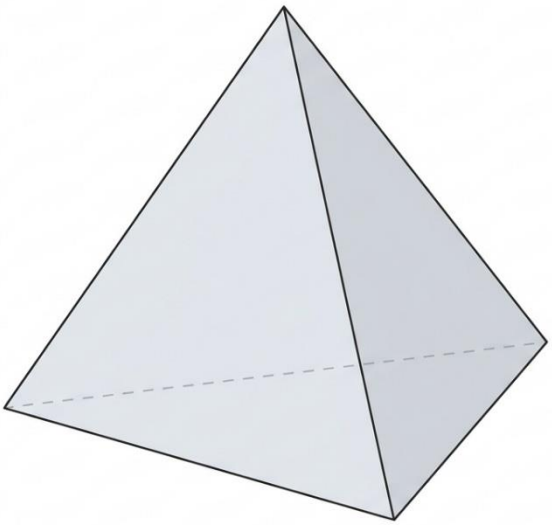
B. Equally likely to landing on tails

C. Impossible

D. Unlikely

STAGE 4 — Questions 31–40

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



A. 6 edges

B. 8 edges

C. 4 edges

D. 12 edges

32. Which 3D shape has 6 square faces of equal size?

A. Rectangular prism

B. Square pyramid

C. Cube

D. Triangular prism

33. A rectangle has a length of 17 cm and a width of 4 cm. What is its perimeter?

A. 21 cm

B. 42 cm

C. 68 cm

D. 34 cm

34. A character is facing north. The character makes a half-turn, then a quarter-turn to the left. Which direction is the character facing now?

A. North

B. South

C. West

D. East

35. Which unit is best for measuring the length of a soccer field?

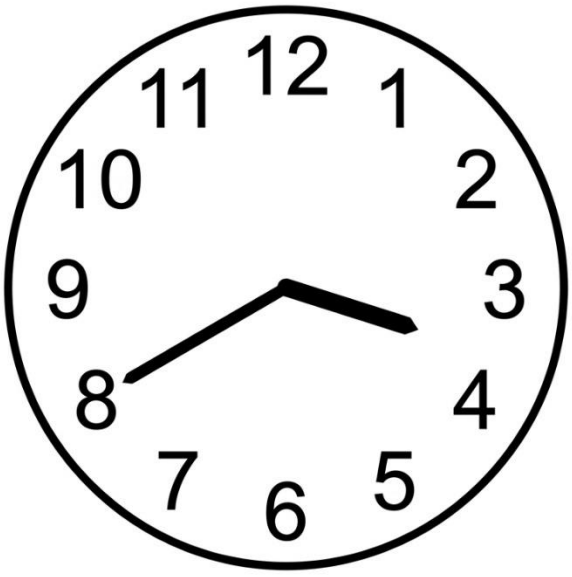
A. Metres

B. Centimetres

C. Millimetres

D. Litres

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



A. 8:15

B. 4:40

C. 3:40

D. 3:08

37. A study session starts at 7:15 PM and ends at 8:55 PM. How long is the study session?

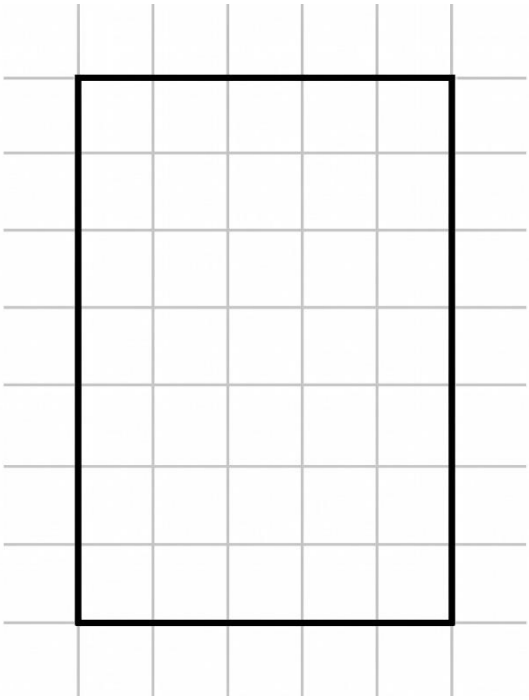
A. 1 hour 30 minutes

B. 1 hour 40 minutes

C. 40 minutes

D. 2 hours

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



A. 14 square centimetres

B. 28 square centimetres

C. 36 square centimetres

D. 45 square centimetres

39. A bathtub holds 100 litres of water. How many millilitres is that?

A. 1,000 mL

B. 10,000 mL

C. 100,000 mL

D. 100 mL

40. A regular pentagon has 5 sides of equal length. If the perimeter is 40 cm, what is the length of one side?

A. 5 cm

B. 8 cm

C. 10 cm

D. 35 cm

Practice Exam 19: Answer Key and Explanations

1. B — 415. Add using the standard algorithm: 247 + 168 = 415. Ones: 7 + 8 = 15 (write 5, carry 1). Tens: 1 + 4 + 6 = 11 (write 1, carry 1). Hundreds: 1 + 2 + 1 = 4. Estimation check: 250 + 170 = 420, close to 415. This tests addition with regrouping in two places (curriculum expectation B2.5).

2. C — 837. Expanded form 800 + 30 + 7 represents 8 hundreds + 3 tens + 7 ones, which combines to 837. Read place-value parts left to right: the hundreds (800), the tens (30), and the ones (7). Translating between expanded and standard form is a core place-value skill from Chapter 1.1.

3. D — 660. To round 658 to the nearest ten, look at the ones digit: 8. Since 8 is greater than 5, round up. The number 658 rounds up to 660. The midpoint between 650 and 660 is 655, and 658 is past that midpoint — confirming the rounding decision (Chapter 1.5).

4. A — 3/4. The pizza has 4 equal slices. Anita ate 1 slice, so 4 − 1 = 3 slices are left. The fraction representing the leftover portion is 3/4. Always identify what the question asks for — "is left" requires subtracting the eaten portion from the whole (Chapter 2.1).

5. D — 56 desks. Use the ratio 8 desks per classroom × 7 classrooms = 56 desks. This is a 1-to-8 scaling problem connecting Chapter 4 multiplication to a real-world layout. Always identify the per-unit value first, then multiply by the count (Chapter 4.6).

6. C — 56. Skip count by 7s starting from 21: 21 is the start, then 28 (1st), 35 (2nd), 42 (3rd), 49 (4th), 56 (5th). The fifth number said after 21 is 56. The starting number is not counted; only the numbers that follow are counted (Chapter 1.6).

7. A — 353. Subtract using the standard algorithm: 600 − 247 = 353. Ones: 0 < 7, regroup. Tens is also 0, so regroup from hundreds. 6 becomes 5, tens become 10, then 10 tens becomes 9 and ones becomes 10. Now: 10 − 7 = 3, 9 − 4 = 5, 5 − 2 = 3. Regrouping across zeros is a critical skill (Chapter 3.3).

8. B — 4 + 4 + 4 + 4 + 4 + 4. Multiplication 6 × 4 means "six groups of four," which equals 4 + 4 + 4 + 4 + 4 + 4 = 24. The repeated-addition form is the exact equivalent of multiplication. The other options (6 + 4 = 10; 64 as a number; 6 + 6 = 12) all produce different values (Chapter 4.1).

9. D — 8 groups. Divide the total campers by the group size: 32 ÷ 4 = 8 groups. This is grouping division — separating 32 campers into groups of 4 produces 8 groups. The related multiplication: 8 × 4 = 32 confirms the answer (Chapter 4.4).

10. A — 2/8. The fourths-and-eighths family of equivalent fractions: 1/4 = 2/8. Splitting each fourth into two smaller equal pieces produces eighths, and 2 of those eighths equal 1/4. Verify: 1 × 2 = 2 and 4 × 2 = 8, giving 2/8. The other options (1/2, 4/1, 1/8) all represent different amounts (Chapter 2.3).

11. C — <. Compare 745 and 754 starting from the hundreds place: 7 = 7 (tied). Move to the tens place: 4 < 5, so 745 is less than 754. The "less than" symbol (<) opens toward the larger number on the right. Always compare place by place starting from the leftmost (Chapter 1.4).

12. B — $13.90. Add Hiro's money: 4 toonies = $8.00; 5 loonies = $5.00; 2 quarters = $0.50; 4 dimes = $0.40. Total: $8.00 + $5.00 + $0.50 + $0.40 = $13.90. Sort coins from largest to smallest denomination before adding to reduce counting errors (Chapter 5.2).

13. A — 275. Count the base-ten blocks: 2 hundred-flats = 200; 7 ten-rods = 70; 5 unit-cubes = 5. Total: 200 + 70 + 5 = 275. Always count hundreds first, then tens, then ones. The place-value composition: 2 hundreds + 7 tens + 5 ones = 275 (Chapter 1.3).

14. D — 6. Division 24 ÷ 4 asks "4 times what equals 24?" From the 4 times table: 4 × 6 = 24, so 24 ÷ 4 = 6. The related multiplication confirms the quotient: 6 × 4 = 24 ✓ (Chapter 4.2).

15. B — 20. The pattern decreases by 4 each step: 32, 28, 24, 20, 16, 12. To verify: 28 − 24 = 4, 24 − 20 = 4, all consistent. The missing term between 24 and 16 is 24 − 4 = 20. This is a shrinking pattern with constant negative growth (Chapter 6.2).

16. A — Start at 9 and add 9 each time. The pattern values are 9, 18, 27, 36, 45, 54 — each term is 9 more than the previous (the 9 times table). Differences: 18 − 9 = 9, 27 − 18 = 9, all consistent. A complete pattern rule names both the starting value and the operation (Chapter 6.3).

17. C — 5. Solve 7 × n = 35 by thinking: "7 times what equals 35?" From the 7 times table: 7 × 5 = 35, so n = 5. Check by substituting: 7 × 5 = 35 ✓. Either think of the multiplication fact or use the inverse: n = 35 ÷ 7 = 5 (Chapter 7.4).

18. D — 56. Trace the code: the loop adds 8 four times. Step 1: 24 + 8 = 32. Step 2: 32 + 8 = 40. Step 3: 40 + 8 = 48. Step 4: 48 + 8 = 56. Or compute directly: 4 × 8 = 32 added to 24 gives 56 (Chapter 8.2).

19. B — 6 × 6 = 4 × 9. Compute both sides: 6 × 6 = 36 and 4 × 9 = 36. Both sides equal 36, so the equation is TRUE. The other options are all false: 14 + 5 = 19 ≠ 70; 20 ÷ 4 = 5 ≠ 9; 16 − 8 = 8 ≠ 2. The equals sign requires both sides to have the same value (Chapter 7.2).

20. A — 96 stickers. Use the ratio 3 stickers per student × 32 students = 96 stickers. This is a 1-to-3 scaling problem connecting Chapter 4 multiplication to a real-world distribution. Always identify the per-unit value first, then multiply by the count (Chapter 4.6).

21. C — Kayaking. Read the bar graph values: Swimming = 11, Canoeing = 9, Fishing = 4, Kayaking = 6. The bar that reaches exactly 6 is Kayaking. Always trace from the top of each bar horizontally to the y-axis to read precise values (Chapter 9.5).

22. D — 28 seedlings. Read the pictograph: Bed C's row has 7 sprout icons. The key states each icon = 4 seedlings, so multiply: 7 × 4 = 28 seedlings. Many-to-one correspondence means each picture represents more than one item — always check the key (Chapter 9.4).

23. A — 9. Add all values: 7 + 11 + 9 + 13 + 5 = 45. Divide by the number of values: 45 ÷ 5 = 9. The mean is 9, representing the typical value in the data set. Always count the number of values carefully before dividing the sum (Chapter 10.1).

24. C — 8. Count how many times each value appears: 8 appears 4 times; 6 appears 2 times; 12 and 14 each appear once. The value that appears most often is 8. The mode is the most frequent value, not the largest — careful counting determines the mode (Chapter 10.2).

25. D — Unlikely. The spinner has 1 red section out of 5 total. Just 1 of 5 sections is red — far less than half. So landing on red is unlikely (possible but improbable). The other options don't fit: "certain" would require all red; "impossible" would require zero red; "likely" would require more than half (Chapter 10.4).

26. B — Badminton. Read the frequency table values: Basketball = 13, Volleyball = 8, Badminton = 5, Floor Hockey = 11. The smallest value is 5, which is Badminton. The sport with the fewest students is the one with the smallest frequency (Chapter 9.3).

27. A — Likely. The bag has 9 strawberry candies out of 10 total (9 + 1 = 10). Almost all the candies are strawberry — far more than half. So drawing strawberry is likely (probable but not certain). The other options don't fit: "certain" would require all strawberry; "impossible" would require zero strawberry; "equally likely" would require 5 of each (Chapter 10.4).

28. C — 7 campers. From Figure PQ-2: Swimming = 11 campers, Fishing = 4 campers. Subtract: $11 - 4 = 7$ campers. The phrase "how many more" signals subtraction — finding the difference between two known values. This is a Level-2 graph-reading task from Chapter 10.3.

29. D — 125 snacks. Add the snacks served each day: 26 + 19 + 31 + 22 + 27 = 125 snacks. Verify sequentially: 26 + 19 = 45; 45 + 31 = 76; 76 + 22 = 98; 98 + 27 = 125. Multi-row table summations require careful sequential addition (Chapter 9.3).

30. B — Equally likely to landing on tails. A coin has two sides — heads and tails. Each side has the same chance of being landed on, so heads and tails are equally likely. "Equally likely" describes outcomes that have identical probability — a 50/50 split (Chapter 10.4).

31. A — 6 edges. A triangular pyramid (tetrahedron) has 6 edges: 3 around the triangular base + 3 edges rising from each base corner to the apex. From the Chapter 11.2 reference table: triangular pyramid = 4 faces, 6 edges, 4 vertices.

32. C — Cube. A cube has 6 square faces, all the same size. A rectangular prism has 6 rectangular faces but they are not all the same size unless it is a cube. A square pyramid has 1 square base plus 4 triangles. A triangular prism has triangular and rectangular faces (Chapter 11.1).

33. B — 42 cm. Perimeter of a rectangle = $2 \times (\text{length} + \text{width}) = 2 \times (17 + 4) = 2 \times 21 = 42$ cm. Or add all four sides: 17 + 4 + 17 + 4 = 42 cm. The shortcut formula is faster than adding all sides individually (Chapter 13.2).

34. D — East. A half-turn rotates 180 degrees. Starting facing north, a half-turn produces facing south. Then a quarter-turn to the left rotates 90° counter-clockwise from south to east. Two-step turn sequences require updating the facing direction after each individual turn (Chapter 12.3).

35. A — Metres. A soccer field is typically 90–110 metres long — firmly in the metre range. Centimetres and millimetres are too small (would produce numbers in the thousands or hundreds of thousands); litres measure capacity, not length. Only metres is appropriate for the length of a soccer field (Chapter 13.1).

36. C — 3:40. The hour hand sits between the 3 and the 4, closer to the 3 — so the hour is 3 (the smaller of the two numbers it sits between). The minute hand points to the 8, which equals 40 minutes past the hour (8 × 5 = 40). The time is 3:40 (Chapter 14.1).

37. B — 1 hour 40 minutes. From 7:15 PM to 8:15 PM is 1 hour. From 8:15 PM to 8:55 PM is 40 minutes. Total elapsed time: 1 hour + 40 minutes = 1 hour 40 minutes. Break elapsed-time calculations into whole-hour portions plus the remaining minutes (Chapter 14.3).

38. D — 45 square centimetres. The rectangle is 5 cm wide and 9 cm tall. Area = length × width = 5 × 9 = 45 square centimetres. Or count the unit squares: 5 columns × 9 rows = 45 squares. Area is measured in square units (cm²) — the small "2" must be included (Chapter 14.5).

39. C — 100,000 mL. The relationship: 1 litre = 1,000 millilitres. So 100 litres = 100 × 1,000 = 100,000 mL. The other options (1,000; 10,000; 100) represent different amounts. Always apply the conversion factor 1,000 when moving between litres and millilitres (Chapter 13.4).

40. B — 8 cm. A regular pentagon has 5 equal sides. Perimeter = 5 × side length, so side length = perimeter ÷ 5 = 40 ÷ 5 = 8 cm. Verify: 5 × 8 = 40 cm ✓. This is the reverse of the standard perimeter calculation — divide by the number of sides instead of multiplying (Chapter 13.2).