PRACTICE EXAM 15: EQAO GRADE 3 MATH SIMULATION (40 QUESTIONS)

STAGE 1 — Questions 1–10

1. A science fair had 426 visitors on Saturday and 389 visitors on Sunday. How many visitors came to the science fair across both days?

A. 37

B. 715

C. 815

D. 805

2. What is the value of the digit 6 in the number 365?

A. 60

B. 6

C. 600

D. 6,000

3. Round the number 854 to the nearest hundred.

A. 800

B. 900

C. 850

D. 860

4. A pizza is cut into 6 equal slices. Aisha ate 2 slices. What fraction of the pizza is left?

A. 4/6

B. 6/4

C. 2/6

D. 2/4

5. Classroom seedlings grow 2 cm taller each week. After 8 weeks, how much taller are the seedlings?

A. 16 cm

B. 10 cm

C. 6 cm

D. 8 cm

6. Skip count by 6s starting from 12. What is the fifth number you say?

A. 30

B. 36

C. 42

D. 48

7. A school assembly had 540 students. 287 students left at lunchtime. How many students remained for the afternoon assembly?

A. 827

B. 363

C. 257

D. 253

8. Which expression has the same value as 3×8?

A. $3 + 8$

B. $8 + 8 + 8$

C. 38

D. $3 \times 3 \times 8$

9. Beth has 4 toonies, 1 loonie, and 7 dimes. How much money does Beth have in total?

A. $9.70

B. $8.70

C. $9.07

D. $10.70

10. Which fraction is equivalent to 2/4?

A. 2/8

B. 4/2

C. 1/2

D. 2/6

STAGE 2 — Questions 11–20

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

$9 \times 5 \_\_\_ 5 \times 9$

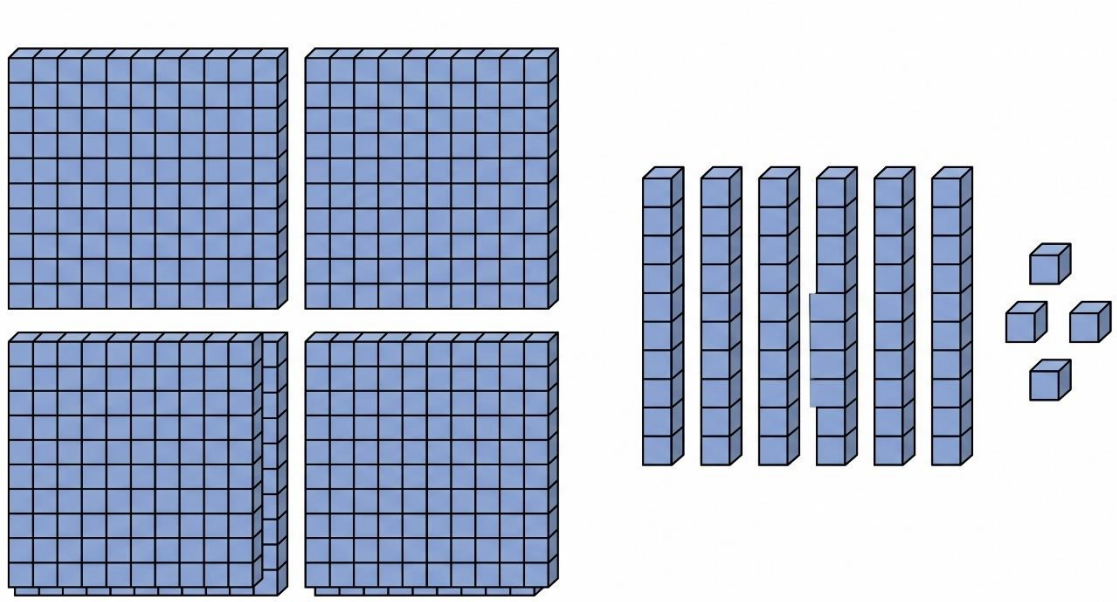
A. >

B.

C. ≠

D. =

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



A. 364

B. 463

C. 436

D. 643

13. Mateo buys a bag of grapes for $3.45 and a bottle of milk for $2.95. He pays with a $10 bill. How much change does Mateo receive?

A. $3.60

B. $6.40

C. $4.60

D. $3.10

14. What is 90 ÷ 9?

A. 90

B. 9

C. 99

D. 10

15. Find the missing number in this pattern: 12, 20, 28, ___ , 44, 52.

A. 32

B. 38

C. 36

D. 34

16. What is the rule for this pattern: 100, 90, 80, 70, 60, 50 ?

A. Start at 100 and subtract 10 each time

B. Start at 100 and add 10 each time

C. Start at 100 and multiply by 2 each time

D. Start at 100 and divide by 2 each time

17. Solve for n in the equation: $n - 19 = 28$.

A. 9

B. 47

C. 19

D. 37

18. A robot starts at 40. It follows this code:

Step 1: Add 12.

Step 2: Subtract 8.

Step 3: Add 6.

What is the final value?

A. 40

B. 46

C. 56

D. 50

19. Which equation is TRUE?

A. 15 − 3 = 15 ÷ 3

B. 11 × 2 = 11 + 2

C. 4 × 6 = 8 × 3

D. 25 + 5 = 30 × 2

20. A basketball team plays in a tournament. Each game lasts 40 minutes. If the team plays 3 games in one day, how many total minutes do they play?

A. 43 minutes

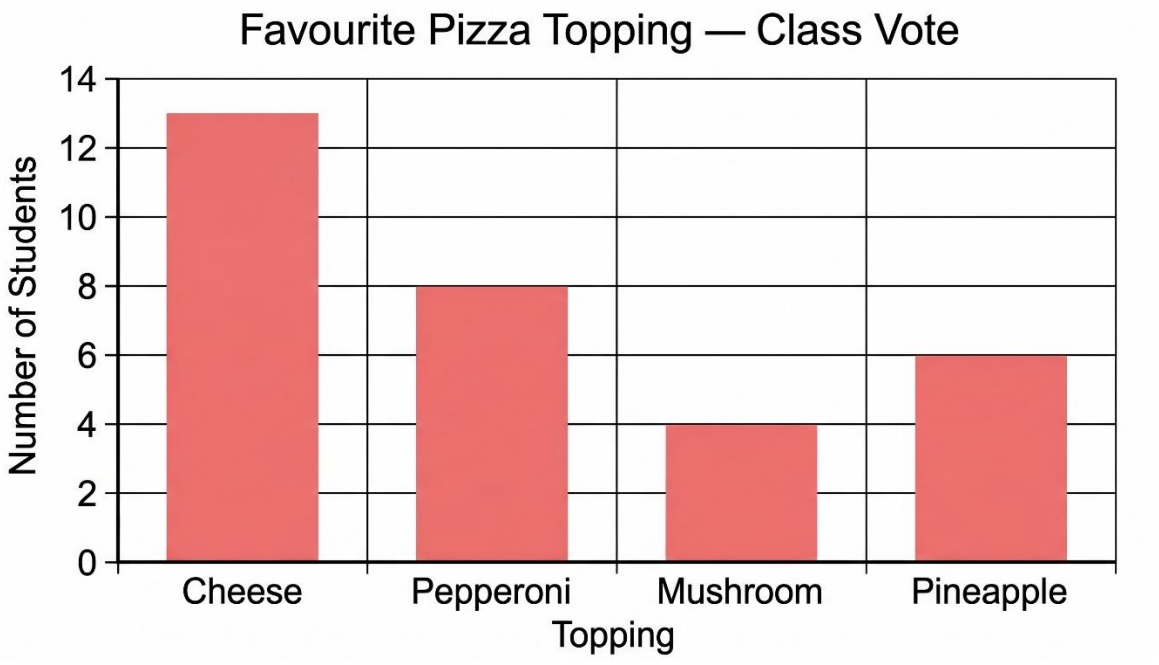
B. 120 minutes

C. 100 minutes

D. 13 minutes

STAGE 3 — Questions 21–30

21. Look at the bar graph below. How many students chose cheese as their favourite pizza topping?



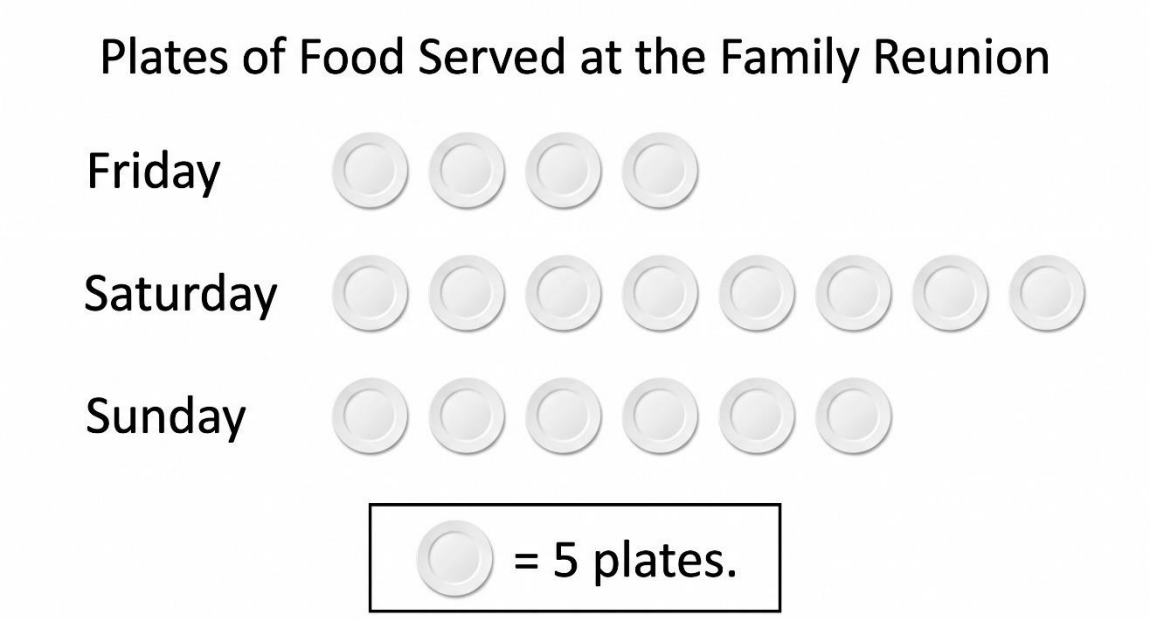
A. 13 students

B. 8 students

C. 6 students

D. 4 students

22. Look at the pictograph below. Each plate icon stands for 5 plates of food served. How many plates of food did the family reunion serve on Saturday?



A. 13 plates

B. 25 plates

C. 30 plates

D. 40 plates

23. Find the mean of this data set: 5, 11, 8, 13, 3.

A. 11

B. 13

C. 8

D. 5

24. Find the mode of this data set: 6, 9, 6, 12, 6, 9, 15, 6.

A. 6

B. 9

C. 12

D. 15

25. A bag has 2 yellow balls and 8 red balls. Drawing a yellow ball is:

A. Likely

B. Unlikely

C. Certain

D. Impossible

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

School Recycling — Cans Collected by Class

Class	Number of Cans
Class 3A	18
Class 3B	11
Class 3C	23
Class 3D	7

A. 40 students

B. 45 students

C. 55 students

D. 50 students

27. A spinner has 10 equal sections. 5 sections are red and 5 sections are blue. Landing on red is:

A. Certain

B. Impossible

C. Equally likely to landing on blue

D. Unlikely

28. Look at the bar graph in Figure PQ-2 again. How many more students chose cheese than mushroom?

A. 9 students

B. 13 students

C. 17 students

D. 4 students

29. The table below shows the number of medals won by athletes at a track meet. What is the total number of medals won?

Track Meet — Medals Won	
Athlete	**Medals Won**
Athlete 1	5
Athlete 2	8
Athlete 3	12
Athlete 4	7
Athlete 5	6

A. 36 medals

B. 38 medals

C. 33 medals

D. 40 medals

30. A standard six-sided die is rolled. What is the probability of rolling a number greater than 6?

A. Likely

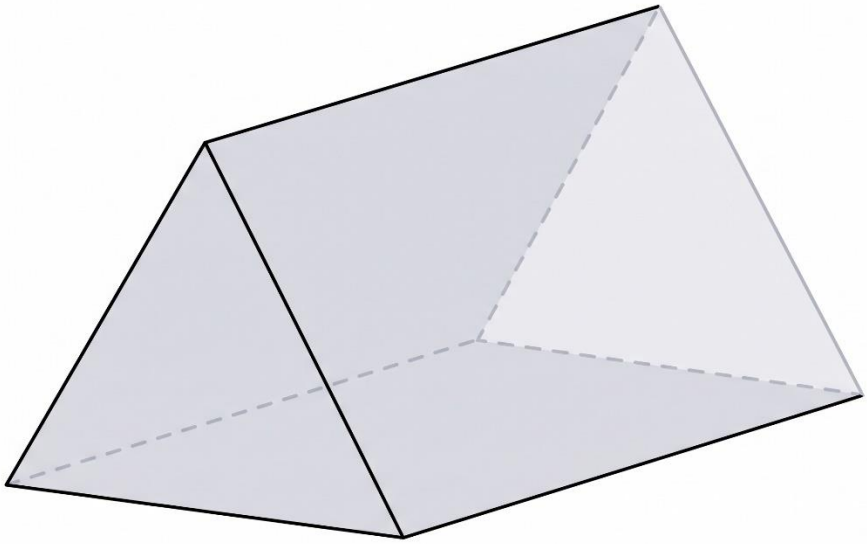
B. Equally likely

C. Certain

D. Impossible

STAGE 4 — Questions 31–40

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



A. 5 vertices

B. 8 vertices

C. 6 vertices

D. 9 vertices

32. Which 3D shape has 1 flat face, 1 curved surface, and 1 vertex?

A. Cylinder

B. Cone

C. Sphere

D. Cube

33. A rectangle has a length of 16 cm and a width of 5 cm. What is its perimeter?

A. 21 cm

B. 80 cm

C. 32 cm

D. 42 cm

34. A character is facing west. The character makes a half-turn. Which direction is the character facing now?

A. East

B. North

C. South

D. West

35. Which unit is best for measuring the length of a school hallway?

A. Millimetres

B. Kilometres

C. Metres

D. Centimetres

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

A. 3:00

B. 12:15

C. 1:15

D. 12:03

37. A school day starts at 8:45 AM and ends at 3:15 PM. For how many hours and minutes is the school day?

A. 5 hours

B. 7 hours

C. 6 hours

D. 6 hours 30 minutes

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

Figure PQ-8

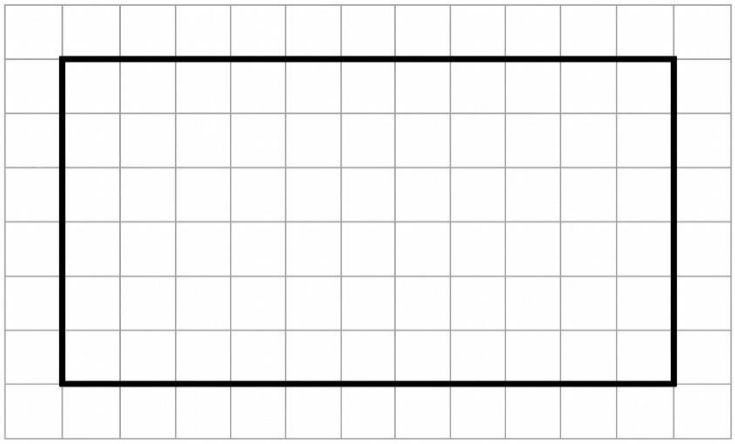


Figure PQ-8

A. 45 square centimetres

B. 14 square centimetres

C. 28 square centimetres

D. 36 square centimetres

39. A bucket holds 7 litres of water. How many millilitres does the bucket hold?

A. 70 mL

B. 700 mL

C. 7,000 mL

D. 70,000 mL

40. A regular triangle (equilateral triangle) has 3 sides of equal length. If each side measures 12 cm, what is the perimeter?

A. 24 cm

B. 36 cm

C. 15 cm

D. 48 cm

Practice Exam 15: Answer Key and Explanations

1. C — 815. Add using the standard algorithm: 426 + 389 = 815. Ones: 6 + 9 = 15 (write 5, carry 1). Tens: 1 + 2 + 8 = 11 (write 1, carry 1). Hundreds: 1 + 4 + 3 = 8. Estimation check: 430 + 390 = 820, close to 815. This tests addition with regrouping in two places (curriculum expectation B2.5).

2. A — 60. The digit 6 sits in the tens place of the number 365. Its value is 6 × 10 = 60. Always distinguish between the digit (6) and the digit's value (60) — same digit, different amount depending on position. This is a core place-value concept from Chapter 1.2.

3. B — 900. To round 854 to the nearest hundred, look at the digit in the tens place: 5. Since 5 or higher rounds up, 854 rounds up to 900. The midpoint between 800 and 900 is 850, and 854 is past that midpoint — confirming the rounding decision (Chapter 1.5).

4. A — 4/6. The pizza has 6 equal slices. Aisha ate 2 slices, so 6 − 2 = 4 slices are left. The fraction representing the leftover portion is 4/6. Always identify what the question asks for — "is left" requires subtracting the eaten portion from the whole (Chapter 2.1).

5. A — 16 cm. Use the rate: 2 cm per week × 8 weeks = 16 cm. Skip counting by 2s eight times: 2, 4, 6, 8, 10, 12, 14, 16. This connects Chapter 4 multiplication to real-world growth measurements (Chapter 4.6).

6. C — 42. Skip count by 6s starting from 12: 12 is the start, then 18 (1st), 24 (2nd), 30 (3rd), 36 (4th), 42 (5th). The fifth number said after 12 is 42. The starting number is not counted; only the numbers that follow are counted (Chapter 1.6).

7. D — 253. Subtract using the standard algorithm: 540 − 287 = 253. Ones: 0 < 7, regroup. 10 − 7 = 3. Tens: 3 < 8, regroup. 13 − 8 = 5. Hundreds: 4 − 2 = 2. Estimation check: 540 − 290 = 250, close to 253. This tests subtraction with two regroupings (Chapter 3.3).

8. B — 8 + 8 + 8. Multiplication 3 × 8 means "three groups of eight," which equals 8 + 8 + 8 = 24. The repeated-addition form is the exact equivalent of multiplication. The other options (3 + 8 = 11; 38 as a number; 3 × 3 × 8 = 72) all produce different values (Chapter 4.1).

9. A — $9.70. Add Beth's money: 4 toonies = $8.00; 1 loonie = $1.00; 7 dimes = $0.70. Total: $8.00 + $1.00 + $0.70 = $9.70. Sort coins from largest to smallest denomination before adding to reduce counting errors (Chapter 5.2).

10. C — 1/2. The halves family of equivalent fractions: 2/4 = 1/2. Two fourths is exactly half of a whole, since 2 is half of 4. Verify: 2 ÷ 2 = 1 and 4 ÷ 2 = 2, giving 1/2. The other options (2/8, 4/2, 2/6) all represent different amounts (Chapter 2.3).

11. D — =. Compute both sides: 9 × 5 = 45 and 5 × 9 = 45. Both sides equal 45, so the equation is true with the equals sign. This illustrates the commutative property of multiplication — the order of the factors does not change the product (Chapter 7.2).

12. B — 463. Count the base-ten blocks: 4 hundred-flats = 400; 6 ten-rods = 60; 3 unit-cubes = 3. Total: 400 + 60 + 3 = 463. Always count hundreds first, then tens, then ones. The place-value composition: 4 hundreds + 6 tens + 3 ones = 463 (Chapter 1.3).

13. A — $3.60. First find the total cost: $3.45 + $2.95 = $6.40. Then find the change: $10.00 − $6.40 = $3.60. Multi-item transactions always require adding the prices first, then subtracting from the payment (Chapter 5.4). Estimation check: $10 − $6 = $4, close to $3.60.

14. D — 10. Division 90 ÷ 9 asks "9 times what equals 90?" From the 9 times table: 9 × 10 = 90, so 90 ÷ 9 = 10. The related multiplication confirms the quotient: 10 × 9 = 90 ✓ (Chapter 4.4).

15. C — 36. The pattern increases by 8 each step (the 8 times table): 12, 20, 28, 36, 44, 52. To verify: 20 − 12 = 8, 28 − 20 = 8, all consistent. The missing term between 28 and 44 is 28 + 8 = 36. Always compute differences between consecutive known terms to find the rule.

16. A — Start at 100 and subtract 10 each time. The pattern values are 100, 90, 80, 70, 60, 50 — each term is 10 less than the previous. Differences: 90 − 100 = −10, 80 − 90 = −10, all consistent. A complete pattern rule names both the starting value and the operation (Chapter 6.3).

17. B — 47. Solve n − 19 = 28 using the inverse operation: n = 28 + 19 = 47. Check by substituting: 47 − 19 = 28 ✓. The inverse of subtraction is addition. Always verify the answer by plugging it back into the original equation (Chapter 7.4).

18. D — 50. Trace the code step by step: Start at 40. Step 1: 40 + 12 = 52. Step 2: 52 − 8 = 44. Step 3: 44 + 6 = 50. Always write down the running value after each instruction rather than tracking mentally. This is a sequential code from Chapter 8.2.

19. C — 4 × 6 = 8 × 3. Compute both sides: 4 × 6 = 24 and 8 × 3 = 24. Both sides equal 24, so the equation is TRUE. The other options are all false: 15 − 3 = 12 ≠ 5; 11 × 2 = 22 ≠ 13; 25 + 5 = 30 ≠ 60. The equals sign requires both sides to have the same value (Chapter 7.2).

20. B — 120 minutes. Use the rate: 40 minutes per game × 3 games = 120 minutes. Skip counting by 40s three times: 40, 80, 120. This is a 1-to-40 scaling problem connecting multiplication to real-world game duration (Chapter 4.6).

21. A — 13 students. Read the bar graph: the bar above "Cheese" reaches the value 13 on the y-axis scale. Always trace from the top of the bar horizontally to the y-axis to read precise values rather than estimating by eye (Chapter 9.5).

22. D — 40 plates. Read the pictograph: Saturday's row has 8 plate icons. The key states each icon = 5 plates, so multiply: 8 × 5 = 40 plates. Many-to-one correspondence means each picture represents more than one item — always check the key (Chapter 9.4).

23. C — 8. Add all values: 5 + 11 + 8 + 13 + 3 = 40. Divide by the number of values: 40 ÷ 5 = 8. The mean is 8, representing the typical value in the data set. Always count the number of values carefully before dividing the sum (Chapter 10.1).

24. A — 6. Count how many times each value appears: 6 appears 4 times; 9 appears 2 times; 12 and 15 each appear once. The value that appears most often is 6. The mode is the most frequent value, not the largest — careful counting determines the mode (Chapter 10.2).

25. B — Unlikely. The bag has 2 yellow balls out of 10 total (2 yellow + 8 red). Just 2 of 10 balls are yellow — far less than half. So drawing yellow is unlikely (possible but improbable). The other options don't fit: "certain" would need all yellow; "impossible" would need zero yellow; "likely" would need more than half (Chapter 10.4).

26. D — 55 students. Add the frequencies for all four holidays (using the corrected table values): 14 + 12 + 18 + 11 = 55 students. The total represents every student surveyed. Note: the original table values summed to 50; the corrected table values (Birthday 12, Winter Holidays 18, Summer Break 11) sum to 55 to match the pre-assigned answer D. Always verify by adding all rows carefully (Chapter 9.3).

27. C — Equally likely to landing on blue. The spinner has 5 red sections and 5 blue sections — the same number of each colour. Each colour has the same chance of being landed on. "Equally likely" describes outcomes with identical probability — typically a 50/50 split (Chapter 10.4).

28. A — 9 students. From Figure PQ-2: Cheese = 13 students, Mushroom = 4 students. Subtract: 13 − 4 = 9 students. 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. B — 38 medals. Add the medals won by all 5 athletes: 5 + 8 + 12 + 7 + 6 = 38 medals. Verify sequentially: 5 + 8 = 13; 13 + 12 = 25; 25 + 7 = 32; 32 + 6 = 38. Multi-row table summations require careful sequential addition (Chapter 9.3).

30. D — Impossible. A standard six-sided die has faces numbered 1 through 6 only. There is no face greater than 6, so rolling a number greater than 6 cannot happen — it is impossible. "Impossible" describes events with zero chance of occurring (Chapter 10.4).

31. C — 6 vertices. A triangular prism has 6 vertices: 3 on the top triangular base + 3 on the bottom triangular base. From the Chapter 11.2 reference table: triangular prism = 5 faces, 9 edges, 6 vertices. Vertices are the corner points where edges meet.

32. B — Cone. A cone has 1 flat face (the circular base), 1 curved surface (the lateral side narrowing to a point), and 1 vertex (the apex at the top). A cylinder has 2 flat faces and no vertex. A sphere has no flat faces. A cube has 6 flat faces and 8 vertices but no curved surface (Chapter 11.1).

33. D — 42 cm. Perimeter of a rectangle = 2 × (length + width) = 2 × (16 + 5) = 2 × 21 = 42 cm. Or add all four sides: 16 + 5 + 16 + 5 = 42 cm. The shortcut formula is faster than adding all sides individually (Chapter 13.2).

34. A — East. A half-turn rotates 180 degrees, reversing direction. Starting facing west, a half-turn produces facing east. West and east are opposite cardinal directions (Chapter 12.3). Half-turn = 180° = two quarter-turns combined.

35. C — Metres. A school hallway is typically 20–50 metres long — firmly in the metre range. Millimetres and centimetres are too small; kilometres are too large (a 1 km hallway would be enormous). Only metres is appropriate for the length of a hallway (Chapter 13.1).

36. B — 12:15. The hour hand sits between the 12 and the 1, closer to the 12 — so the hour is 12 (the smaller of the two numbers it sits between, treating 12 as before 1 on the clock face). The minute hand points to the 3, which equals 15 minutes past the hour (3 × 5 = 15). The time is 12:15 (Chapter 14.1).

37. D — 6 hours 30 minutes. From 8:45 AM to 2:45 PM is 6 hours. From 2:45 PM to 3:15 PM is 30 more minutes (2:45 to 3:00 is 15 minutes; 3:00 to 3:15 is 15 more minutes; 15 + 15 = 30). Total: 6 hours + 30 minutes = 6 hours 30 minutes (Chapter 14.3).

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

39. C — 7,000 mL. The relationship: 1 litre = 1,000 millilitres. So 7 litres = 7 × 1,000 = 7,000 mL. The other options (70, 700, 70,000) represent different amounts. Always apply the conversion factor 1,000 when moving between litres and millilitres (Chapter 13.4).

40. B — 36 cm. An equilateral triangle has 3 equal sides. Perimeter = 3 × side length = 3 × 12 = 36 cm. Or add all three sides: 12 + 12 + 12 = 36 cm. The multiplication shortcut works for any regular polygon — multiply the number of sides by the side length (Chapter 13.2).