The term revision tests show how well the students have grasped the content of the term. There are a number of possible ways of managing the chapter revision tests:

1. As a formal class test at the end of the term
2. As homework, after completing the work that term
3. As classwork, where students, in pairs or small groups, work through the test in discussion with each other and the teacher
4. As a formal test at some point in the school year after revising the term’s work

Given the time constraints of the school year, we strongly recommend that methods 2 or 3 be considered. As the only person with direct access to the answers, teacher participation is essential.

For ease of completion, the term revision tests are included as independent worksheets in the section that follows. Students simply write down their answers on these sheets. In some instances, students need to construct diagrams on separate pieces of paper. When this happens, make sure that the students write their names and class and the test details at the top of the sheets of paper.
Term Revision test 1 (Chapters 1, 2, 3)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. The value of the 8 in 18 214 is:
   A. 8 units
   B. 8 tens
   C. 8 hundreds
   D. 8 thousands
   E. 8 ten thousands

2. The Roman numerals CXCIV represent the number:
   A. 194
   B. 196
   C. 214
   D. 215
   E. 216

3. The value of is:
   A. 12
   B. 24
   C. 26
   D. 36
   E. 62

4. 5 300 ml expressed in litres is:
   A. 0.053
   B. 0.53
   C. 5.3
   D. 53
   E. 530

5. The number of minutes in 1 $\frac{1}{2}$ hours is:
   A. 30
   B. 45
   C. 65
   D. 75
   E. 90

6. Express 60 as a product of prime factors.
   ____________________________________________

7. Find the LCM of 6 and 14.
   ____________________________________________

8. Find the HCF of 32, 40 and 56.
   ____________________________________________

9. Find the sum of 2.82 t and 893 kg. Express the answer in tonnes.
   ____________________________________________

10. Find the difference between 1.42 m and 29 cm. Express the answer in cm.
    ____________________________________________
Circle the correct answer for Questions 1–5. Circle the letter only.

1. Which one of the following is not equivalent to $\frac{1}{2}$?
   - A $\frac{9}{18}$
   - B $\frac{11}{22}$
   - C $\frac{15}{30}$
   - D $\frac{16}{32}$
   - E $\frac{24}{42}$

2. If $5\frac{1}{7}$ is expressed as an improper fraction, its numerator will be:
   - A 8
   - B 12
   - C 13
   - D 35
   - E 36

3. To express the fraction $\frac{30}{48}$ in its lowest terms, divide the numerator and denominator by:
   - A 2
   - B 3
   - C 5
   - D 6
   - E 8

4. 45 minutes, expressed as a fraction of one hour, is:
   - A $\frac{1}{60}$
   - B $\frac{1}{45}$
   - C $\frac{3}{4}$
   - D $\frac{4}{5}$
   - E $\frac{4}{3}$

5. $\frac{4}{25}$ expressed as a percentage is:
   - A 4%
   - B $6\frac{1}{4}$%
   - C 8%
   - D 12%
   - E 16%

6. Simplify $5\frac{1}{4} + 1\frac{1}{6} - 3\frac{2}{3}$.

7. Simplify $6\frac{1}{4} \times 1\frac{3}{5}$.

8. Simplify $6\frac{3}{4} + 5\frac{5}{8}$.

9. During a radio programme lasting 1 hour, there were 18 minutes of talking; the rest was music. What percentage of the radio programme was music?

10. One-sixth of a stick is cut off and then three-tenths of the remaining piece is thrown away. What fraction of the original stick remains?
Term Revision test 3 (Chapters 5, 7)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. When \( x = 8 \), the value of \( 18 - x \) is:
   - A 1
   - B 8
   - C 10
   - D 18
   - E 26

2. If \( 13 = a - 9 \) is a true sentence, then \( a = \):
   - A 0
   - B 4
   - C 9
   - D 13
   - E 22

3. Maria is \( x \) years old. In two years' time she will be 16 years old. \( x = \):
   - A 2
   - B 7
   - C 8
   - D 14
   - E 18

4. The number which is 6 less than \( m \) is:
   - A \( m - 6 \)
   - B \( 6 - m \)
   - C \( 6m \)
   - D \( \frac{m}{6} \)
   - E \( m + 6 \)

5. When \( x = 4 \), the value of \( 8x \) is:
   - A 2
   - B 4
   - C 12
   - D 32
   - E 84

6. Simplify: \( a - 5a + 8a - 2a \).
   
   

7. Simplify: \( 6x - 2y - 5y - 3x \).
   
   

8. A girl has \( \text{₦}n \). She gives \( \text{₦}180 \) to her brother and spends the other \( \text{₦}220 \). What is the value of \( n \)?
   
   

9. A cup holds \( d \) ml of tea. A student drinks one-fifth of the tea. How much tea is left?
   
   

10. A trader buys 30 shirts for \( \text{₦}x \) each. He sells them all for \( \text{₦}y \) each. What is his profit?
   
   

Term Revision test 4 (Chapters 6, 8)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. Each face of a cuboid is in the shape of a:
   A) triangle  B) rectangle  C) square
   D) hexagon  E) circle.

2. Which net in Fig. 32 is the net of a triangular prism?

   a)  b)  c)  d)  e)

   Fig. 32

3. The angle between the hands of a clock at 2 o’clock is:
   A) 2°  B) 24°  C) 30°  D) 60°  E) 72°.

4. The number of degrees in \( \frac{1}{8} \) of a revolution is:
   A) 8  B) 12\( \frac{1}{2} \)  C) 22\( \frac{1}{2} \)  D) 45  E) 90

5. It takes 72 cm of wire to make a skeleton model of a cube. The length of one edge of the cube is:
   A) 6 cm  B) 8 cm  C) 9 cm  D) 12 cm  E) 18 cm

6. Fig. 33 shows the cuboid ABCDEFGH.

   a) Faces ABGF and BCHG meet along which edge?
   b) Which edges meet at vertex H?
   c) Edges BG and AB meet at which vertex?
7 Use a protractor to measure $\hat{ABC}$ in the triangle in Fig. 34.

Fig. 34

8 Use a protractor to construct an angle of $56^\circ$.

Fig. 35 shows the net of a triangular-based pyramid.

Fig. 35

If the net is folded to make the pyramid:

a which edge will join to edge BC?

b which point will join to point A?

10 Find, in degrees, the angle between the hour hand and the minute hand of a clock at $\frac{1}{2}$ past 6.
Term General revision test A (Chapters 1–8)

Circle the correct answer for Questions 1–10. Circle the letter only.

1 The value of the 3 in 24.635 is:
   A 3 thousandths  B 3 hundredths  C 3 tenths
   D 3 units       E 3 tens

2 The HCF of 24 and 60 is:
   A 2     B 3     C 4     D 6     E 12

3 A distance of 3 km and 29 m, expressed in metres is:
   A 3.029   B 3.29   C 329   D 3.029   E 3.290

4 The lowest common denominator of $\frac{2}{3}, \frac{4}{5}, \frac{5}{6}$ and $\frac{3}{10}$ is:
   A 15   B 30   C 50   D 60   E 900

5 Four pages of a 16-page newspaper are missing. The percentage missing is
   A $\frac{1}{4}$%  B 4%  C 16%  D 25%  E 75%

6 If $26 - x = x$ is a true sentence, the value of $x$ is:
   A 0  B 2  C 13  D 24  E 26

7 If $x = 3$, the value of $7x - 2x$ is:
   A 6  B 8  C 15  D 21  E 53

8 Which one of the following statements about a cylinder is false?
   A A cylinder has two vertices.
   B A cylinder has two plane faces.
   C A cylinder has two curved edges.
   D A cylinder has one curved face.
   E The net of a cylinder has one rectangle and two circles.

9 The angle between the hands of a clock at 8 o’clock is:
   A 20°  B 40°  C 60°  D 90°  E 120°

10 $\frac{3}{5}$ of $\frac{5}{3}$ is:
    A $\frac{1}{5}$  B $\frac{1}{3}$  C $\frac{9}{25}$  D 1  E $2\frac{7}{9}$

11 Express this year’s date in Roman numerals.
12 Find the LCM of 20, 24 and 30.

13 Find the sum of 600 ml, 900 ml and 60 ml. Give your answer in litres.

14 Simplify the following.
   a \( \frac{1}{20} + \frac{3}{5} \)
   b \( 5\frac{3}{8} - 4\frac{3}{4} \)
   c \( 3\frac{3}{4} \times 1\frac{1}{2} \)
   d \( 3\frac{1}{3} + 2\frac{2}{9} \)

15 A woman gives \( \frac{1}{4} \) of a cake to her son, \( \frac{1}{4} \) to her daughter and \( \frac{1}{3} \) to her husband. What fraction is left for herself?

16 A farmer sells \( \frac{2}{5} \) of his cattle. He gives \( \frac{1}{3} \) of the remainder to his son. What fraction of the cattle is left?

17 A student walks for \( 3\frac{1}{2} \) minutes and runs for \( 8\frac{1}{2} \) minutes. What percentage of the journey time is spent running?

18 If \( x = 2 \), find the value of the following.
   a \( 7 - x \)
   b \( 5x - 3 \)
   c \( \frac{3}{4}x \)
   d \( 4 - 2x \)

19 I buy 5 metres of cloth at \( \text{N}x \) per metre. How much change will I get from \( \text{N}7000 \)?

20 Make a drawing like that in Fig. 36, such that \( \triangle ACD = 114^\circ \). \( \hat{A} \) and \( \hat{B} \) can be any size. Measure \( \hat{A} \) and \( \hat{B} \). Find the sum of \( \hat{A} \) and \( \hat{B} \).

Fig. 36
Term Revision test 5 (Chapter 9)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. Select the correct answer to the following. \(0.017 \times 100 =\)
   A 0.000 17   B 0.001 7   C 0.17
   D 1.7   E 17

2. Select the correct answer to the following. \(0.5 \times 0.2 =\)
   A 0.001   B 0.01   C 0.1
   D 1   E 10

3. Select the correct answer to the following. \(24 \div 10 000 =\)
   A 0.000 024   B 0.000 24   C 0.002 4
   D 0.024   E 0.24

4. Select the correct answer to the following. \(1 200 \div 0.04 =\)
   A 30 000   B 3 000   C 300
   D 30   E 3

5. If \(23 \times 54 = 1.242\), then \(1.242 \div 0.54 =\)
   A 0.023   B 0.23   C 2.3
   D 23   E 230

6. A piece of string 1.82 metres long is cut from a string 6.58 metres long. What length of string is left?

   _______________________________________

7. Find the product of 0.17 and 5.2.

   _______________________________________

8. What percentage of 2 km is 800 m?

   _______________________________________

9. How many cans, each 1.8 ℓ in capacity, can be filled from a tank containing 54 ℓ of water?

   _______________________________________

10. The value of a house when new was N25 350 000. After 5 years its value had increased by \(33\frac{1}{3}\%\). Calculate its value after 5 years.

   _______________________________________

   _______________________________________

   _______________________________________

   _______________________________________
Term Revision test 6 (Chapters 10, 11)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. The number which is 5 times greater than \(a\) is:
   A. \(5 - a\)  
   B. \(\frac{a}{5}\)  
   C. \(5 + a\)  
   D. \(5a\)  
   E. \(a - 5\)

2. The sum of \(a\) minutes and \(b\) seconds, expressed in minutes, is:
   A. \(60a + b\)  
   B. \(a + 60b\)  
   C. \(a + b\)  
   D. \(\frac{a}{60 + b}\)  
   E. \(\frac{a + b}{60}\)

3. The number of years in \(x\) calendar months is:
   A. \(12 + x\)  
   B. \(\frac{x}{12}\)  
   C. \(12x\)  
   D. \(\frac{12}{x}\)  
   E. \(12 - x\)

4. Which one of the following has no lines of symmetry?
   A. circle  
   B. regular hexagon  
   C. isosceles triangle  
   D. equilateral triangle  
   E. scalene triangle

5. The diagonals of one of the following always cross at right angles. Which one?
   A. rectangle  
   B. square  
   C. parallelogram  
   D. trapezium  
   E. regular pentagon

6. How many sweets at 50 kobo each can be bought for \(N\)5?

7. Express:
   a. \(w\) kilograms in grams
   b. \(b\) centimetres in millimetres
   c. \(d\) kobo in naira.

8. Name four quadrilaterals that have at least one pair of parallel sides.

9. What angle does the diagonal of a square make with its sides?

10. A girl is \(c\) years old. Her brother is twice as old. How old will the brother be in \(d\) years’ time?
Term Revision test 7 (Chapters 12, 15)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. Which one of the following numbers is the greatest?
   A 22  B 230  C 2100  D 250  E 23

2. Select the correct answer to the following. 
   \(-20 - (-70) =\)
   A 290  B 250  C 150  D 190  E None of these

3. Select the correct answer to the following. 
   \(13 - (-8) - 5 =\)
   A 212  B 22  C 16  D 112  E 116

4. Select the correct answer to the following. 
   \(9 \times 2 - 12 \div 2 + 2 =\)
   A 243  B 218  C 5  D 14  E 15

5. Daudu is \(n\) years old. His twin sisters are two years younger than he is. The sum of his sisters’ ages, in years, is:
   A \(n - 2\)  B \(n - 4\)  C \(2n\)  D \(2n - 2\)  E \(2n - 4\)

6. The temperature inside a refrigerator is 2.4 °C. What will be the temperature if it falls by 3.9 °C?

7. Simplify the following.
   a \(3xy \times 9y\)  
   b \(2n \times 5an^2\)  
   c \(36a^2b+ 12ab\)  
   d \(\frac{5x^2}{x}\)

8. Simplify the following.
   a \(3 - 11\)  
   b \(-9 + 4\)  
   c \(8 - (-15)\)  
   d \(-6 + (-6)\)

9. Simplify the following.
   a \(-3a + (6y - 8a) + y\)  
   b \(-2x - 5b - (8b - 5x)\)

10. Find the sum of the whole number \(n\) and the next two whole numbers greater than \(n\).
Term Revision test 8 (Chapters 13, 14, 16)

Circle the correct answer for Questions 1–5. Circle the letter only.

1 The perimeter of a rectangle is 26 cm. Its breadth is 4 cm. Its length is:
A 9 cm  B 11 cm  C 13 cm  D 17 cm  E 22 cm

2 The exact value of π is:
A 3.142  B $\frac{3}{7}$  C 3.14  D 3.1  E impossible to find.

3 The area of a floor 3 metres square (3 m by 3 m) is:
A 3 m²  B 6 m²  C 9 m²  D 300 m²  E 90 000 m²

4 A triangle and a parallelogram have the same base and same area. If the height of the triangle is 5 cm, the height of the parallelogram is:
A 1.25 cm  B 2.5 cm  C 5 cm  D 10 cm  E 25 cm

5 Which of the following is the number of cm³ in 1 m³?
A 100  B 1 000  C 10 000  D 100 000  E 1 000 000

6 Calculate the area of a rectangle that measures 11 cm by 3 cm. Calculate the area of a square with the same perimeter.

7 Use 3.14 for π to calculate the area of a circle of radius 3 m.

8 Calculate the area of the triangle in Fig. 37.
Calculate the height $h$ shown in the diagram.

9 A floor 4 m long by 2$\frac{1}{2}$ m wide is concreted to a thickness of 10 cm. Calculate the volume of the concrete.

10 Calculate the area of the shape shown in Fig. 38.
Use $\frac{22}{7}$ for π.
Term General revision test B (Chapters 9–16)

Circle the correct answer for Questions 1–10. Circle the letter only.

1 Select the correct answer to the following. 3.2 ÷ 8000 =
   A 0.0004  B 0.004  C 0.04  D 4  E 400

2 Which of the following is 20% of 1 hour?
   A 5 min  B 6 min  C 12 min  D 20 min  E 30 min

3 The difference, in grams, between x kg and 50x g is:
   A x – 50x  B 49x  C 50x  D 950x  E 9.050x

4 Which one of the following has two (and only two) lines of symmetry?
   A square  B rectangle  C isosceles triangle
   D regular pentagon  E equilateral triangle

5 If 3.4 × 1.8 = 6.12, then 61.2 ÷ 0.18 =
   A 0.34  B 3.4  C 34  D 340  E 3400

6 Which of the following is the difference between temperatures of 17 °C above zero and 12 °C below zero?
   A 5 °C  B 12 °C  C 17 °C  D 22 °C  E 29 °C

7 Select the correct answer to the following. 3a – (9a – 5b) =
   A a + 5b  B 6a – 5b  C –6a – 5b  D b – 6a  E 5b – 6a

8 Select the correct answer to the following. 12x^2y ÷ 3x =
   A 4xy  B 8y  C 9xy  D 12xy  E 16y

9 A farmer buys n sheep at N\textit{a} each and sells them at N\textit{b} each. Which of the following is his profit in naira?
   A an – bn  B bn – an  C a – b  D b – a  E \frac{b-a}{n}

10 A square has the same perimeter as a 5 cm by 7 cm rectangle. Which of the following is the area of the square?
   A 9 cm^2  B 25 cm^2  C 35 cm^2  D 36 cm^2  E 49 cm^2
11 A thread is wound 100 times round a reel of diameter 3 cm. Calculate the length of the thread. (Use 3.14 for π.)

12 A student walks at the rate of 88 paces to the minute. If each pace is 0.85 m long, how far does the student walk in 10 minutes?

13 A price of N1 250 is marked down by N50. By what percentage is the price reduced?

14 What fraction of $1.75 is 77c? Express this fraction as a percentage.

15 From a piece of string 3½ m long, a length of 55x cm is cut off. Find the length of the remaining string in cm.

16 A boy is half his mother’s age. If the boy is y years old, what will be the sum of their ages in z years’ time?

17 Simplify the following.
   a  \(-4 - 9\)
   b  \(5 - (-12)\)
   c  \(-8 - (-3)\)
   d  \(10 + (-9)\)

18 Simplify the following.
   a  \(21 - (7x + 5)\)
   b  \(3a + 8 - (8 - 3a)\)
   c  \(6 - (9x - 7) + 2x\)

19 Four discs, each of radius 1 cm, are cut from a 5 cm by 5 cm cardboard square. Use the value 3.14 for π to find the area of cardboard left over.

20 One litre of water is poured into a rectangular container. Find the height that the water will rise if the area of the base of the container is 80 cm².
Term Revision test 9 (Chapters 17, 18, 22)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. When recording data, the tally marks |||| |||| ||| represent the number:
   A 13    B 15    C 18    D 20    E 33

2. After five games, a football team’s goal average is 2.8. After one more game the goal average is 3. The number of goals scored in the 6th game was:
   A 3    B 4    C 5    D 6    E 7

Use the following set of numbers in questions 3, 4 and 5.

2, 2, 2, 5, 5, 8, 9, 10, 11

3. The mode of the above set of numbers is:
   A 2    B 3    C 5    D 6    E 9

4. The median of the above set of numbers is:
   A 2    B 3    C 5    D 6    E 9

5. The mean of the above set of numbers is:
   A 2    B 3    C 5    D 6    E 9

6. 100 people were asked their ages; the results are given in Table 18.

<table>
<thead>
<tr>
<th>age</th>
<th>&lt;15</th>
<th>15–29</th>
<th>30–44</th>
<th>45–59</th>
<th>&gt;60</th>
</tr>
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<tbody>
<tr>
<td>frequency</td>
<td>43</td>
<td>32</td>
<td>17</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

   Table 18

   a. What fraction of the people were under 30?

   b. What percentage of the people were between 45 and 59?

Use a sheet of grid paper to draw your answers to questions 7–9.

7. Draw a bar chart to show the information in question 6.

8. A book has 120 pages of drawings, 72 pages of photographs and 168 pages of writing. Show this information on a pie chart.

9. Show the information from question 8 on a pictogram. (Let each symbol represent 24 pages.)

10. During a week, the midday temperatures were: 28, 29, 29, 33, 28, 24 and 25 °C. Calculate the mean midday temperature.
Term Revision test 10 (Chapter 19)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. If \(13 = x - 5\), then \(x =\)
   
   A 1  B 8  C 9  D 16  E 18

2. The value of \(x\) that makes \(\frac{24}{x} = 8\) true is:
   
   A 3  B 8  C 16  D 32  E 192

3. If \(x - 10 = 10\), then \(x =\)
   
   A 0  B 1  C 10  D 20  E 100

4. If \(6x + 7 = 55\), then \(x =\)
   
   A 7  B \(\frac{8}{3}\)  C 10  D 42  E 48

5. The smaller of two consecutive numbers is doubled and added to the greater. If the smaller number is \(n\), then the total will be:
   
   A \(2n\)  B \(2n + 1\)  C \(3n\)  D \(3n + 1\)  E \(3n + 2\)

6. Solve the following.
   
   a \(13 - x = 10\)  _____________________
   
   b \(\frac{a}{3} = 3\)  _____________________
   
   c \(y + 8 = 20\)  _____________________

7. Solve the following.
   
   a \(4n - 3 = 17\)  _____________________
   
   b \(50 = 7d + 1\)  _____________________
   
   c \(12x + 8 = 20\)  _____________________

8. Two consecutive whole numbers are such that twice the smaller added to the greater make a total of 52. Find the numbers.
   
   ______________________________________________________

9. A packet of candles and a box of matches cost \(\$420\). The candles cost 20 times as much as the matches. Find the cost of the matches.
   
   ______________________________________________________

10. A number, \(x\), is multiplied by 3; 5 is subtracted from the result. The final answer is 16. Make an equation in \(x\) and find the value of \(x\).

   ______________________________________________________
Term Revision test 11 (Chapters 20, 21)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. XÔY and YÔZ are adjacent on a straight line XOZ. If XÔY = 58°, then YÔZ =
   A 32°   B 122°   C 132°   D 238°   E 302°

2. Complete the following sentence correctly. Vertically opposite angles …
   A are alternate  B add up to 180°  C are corresponding
   D are equal  E add up to 360°.

3. Three lines meet at a point. If the sum of two of the angles formed is 163°, the other angle is:
   A 17°   B 73°   C 163°   D 197°   E 343°

4. Two angles of \( \triangle ABC \) are 46° and 67°. Calculate the third angle of \( \triangle ABC \). Hence decide which one of the following kinds of triangle it is.
   A equilateral triangle  B isosceles triangle  C right-angled triangle
   D scalene triangle  E obtuse-angled triangle.

5. In \( \triangle XYZ \), XY = 5 cm, XZY = 40° and XZY = 60°. Which sketch in Fig. 39 shows this information correctly?
   A  
   B  
   C  
   D  
   E  

Fig. 39

6. Construct \( \triangle ABC \) in which BC = 4 cm, A\( \hat{B} \)C = 50° and AB = 6 cm.
7 In Fig. 40, find $a, b, c$.

8 In Fig. 41, find $a, b, c, d$.

9 Construct a parallelogram $ABCD$ in which $AB = 4$ cm, $\angle ABC = 70^\circ$ and $BC = 5$ cm. Measure the distance between one pair of parallels and hence calculate the area of the parallelogram.

10 In Fig. 42, find $a, b, c$. 
Term Revision test 12 (Chapters 23, 24)

Circle the correct answer for Questions 1–5. Circle the letter only.

1. 67.053 to the nearest tenth =
   A 70    
   B 67    
   C 67.0  
   D 67.1  
   E 67.05

2. 41 300 = 41 285 to the nearest:
   A ten thousand
   B thousand
   C hundred
   D ten
   E whole number

3. Which one of the following is usually measured in metres?
   A thickness of a pencil
   B width of a book
   C diameter of a coin
   D distance from Enugu to Benin
   E distance round a running track

4. Which one of the following is most likely to be the correct value of €3.90 \times 7.8?
   A 50c
   B €20
   C €21.50
   D €30.42
   E €33.00

5. Which one of the following is not sensible?
   A The woman’s hand-span was 20 cm.
   B The boy ran 100 km in an hour.
   C The height of the tree was 5.8 m.
   D The capacity of the cup was 280 ml.
   E It took a day to cycle from Lagos to Ibadan.

6. Convert the following:
   a \text{110110}_2 \text{ to base ten }
   b \text{25}_10 \text{ to base two }

7. Calculate the following, leaving your answer in base two.
   a 101 + 111
   b 111 – 10
   c 101 \times 11

8. Estimate the cost of 20.5 hectares of land at \₦196 000 per hectare.

9. A hotel bill for nine days was \₦59 690. Estimate the daily cost.

10. To estimate the length of a room without a tape measure, a person ‘measures’ the room on the floor as about eleven shoe-lengths long. Later, the shoes are found to be 28 cm long. Find the approximate length of the room in metres.
Term General revision test C (Chapters 17–24)

Circle the correct answer for Questions 1–10. Circle the letter only.

1. The mean of 3, 5, 4, 8, 6, 4, 6, 2, 3, 6 is:
   A 4.5    B 4.7    C 5    D 6.1    E 10

2. A number is trebled and then 17 is subtracted. If the result is 40, the original number is:
   A $7\frac{2}{3}$    B 11    C 19    D 57    E 69

3. $16 - x = x$ is true when $x =$
   A 0    B 8    C 14    D 16    E 32

4. In Fig. 43, the value of $x$ is:
   A 28°    B 31°    C 33°    D 56°    E 62°

5. The mass of which one of the following is usually measured in tonnes?
   A a parcel    B a packet of sugar    C a person’s body
   D a packet of biscuits    E a lorry’s load

6. The mean of three numbers is 6. The mode of the three numbers is 7. The lowest of the three numbers is:
   A 2    B 3    C 4    D 6    E 7

7. If $\frac{x}{12} = 3$, then $x =$
   A $\frac{1}{4}$    B 3    C 4    D 9    E 36

8. In Fig. 44, $a =$
   A 21    B 24    C 42
   D 48    E 69

9. In 2006, the estimated population of Nigeria was 131 000 000. The area of Nigeria is 923 768 square km. In 2006, Nigeria’s population density (i.e. the number of people per square km) was approximately:
   A 13    B 40    C 130    D 400    E 1 300

10. $x = 23\frac{4}{5} + 8\frac{1}{2}$. Use estimation to decide which one of the following is the accurate value of $x$.
    A $2\frac{1}{2}$    B $2\frac{2}{3}$    C $1\frac{2}{5}$    D $2\frac{4}{5}$    E $3\frac{3}{5}$
11 Solve the following.
   \[ a \quad 5 + 8a = 37 \quad \underline{} \quad b \quad 40 = 14a - 30 \quad \underline{} \quad c \quad 2a - 1 = 31 \quad \underline{} \]

12 A traffic survey gave the results shown in Table 18.

<table>
<thead>
<tr>
<th>vehicles</th>
<th>car</th>
<th>lorry</th>
<th>bus</th>
<th>bicycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>frequency</td>
<td>12</td>
<td>10</td>
<td>5</td>
<td>23</td>
</tr>
</tbody>
</table>

Table 19

   \[ a \quad \text{How many lorries were there for every one bus?} \quad \underline{} \quad b \quad \text{What percentage of the vehicles were bicycles?} \quad \underline{} \]

13 Represent the data in question 12 on a bar chart. Use a separate sheet of grid paper.

14 Solve the following.
   \[ a \quad 3x - 4 = 1 \quad \underline{} \quad b \quad 7 = 5 + 5x \quad \underline{} \quad c \quad 7 + 8x = 9 \quad \underline{} \]

15 In Fig. 45, find \( a, b, c \).

\[ \underline{} \quad \underline{} \quad \underline{} \]

16 Ten tomatoes have a mass of 628 g. A woman buys 2.12 kg of tomatoes. Approximately how many tomatoes will she get?

\[ \underline{} \]

17 Find the mean, median and mode of 4 hours, 2 hours, 3 hours and 2 hours.

\[ \underline{} \]

18 A plate costs twice as much as a saucer. Three plates and four saucers cost ₦1 800. How much does each cost?

\[ \underline{} \]

19 On a separate sheet of paper, construct \( \triangle ABC \) in which \( BC = 6 \text{ cm} \), \( \angle ABC = 30^\circ \) and \( \angle BAC = 100^\circ \). Measure the perpendicular distance of \( A \) from \( BC \) and hence calculate the area of the triangle.

20 Calculate the following, leaving your answer in base two.
   \[ a \quad 101 + 11 \quad \underline{} \quad b \quad 101 - 10 \quad \underline{} \quad c \quad 101 \times 11 \quad \underline{} \]