



1 Find the next number in the sequence 23, 20, 17, 14, ...

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

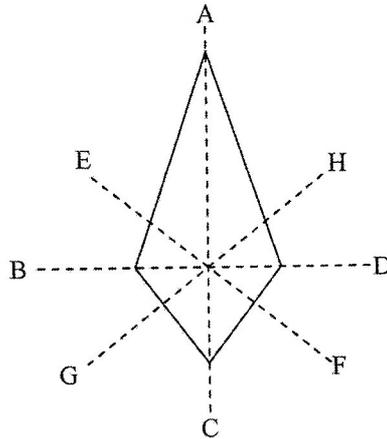
2 Add 251 279 to 384 945.

- A 636 114
- B 636 124
- C 636 214
- D 636 224

3 Express 0.45 as a percentage.

- A 45%
- B 55%
- C 65%
- D 75%

4 Which of the lines on the diagram is a line of symmetry?

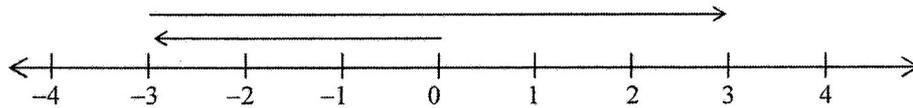


- A GH
- B EF
- C BD
- D AC

5  $823\,146 - 371\,502 =$

- A 451 644
- B 452 644
- C 551 644
- D 552 644

- 6 The number line below shows ...



- A  $-3 + (+5) = +3.$   
 B  $-3 + (+6) = +3.$   
 C  $+3 + (-6) = +3.$   
 D  $+3 + (-5) = +3.$
- 7 In Roman numerals, the number 1 643 can be written as ...  
 A MDCXLIV.  
 B MCDXLVI.  
 C MDCXLIII.  
 D MDCLVI.
- 8 The numbers 3, 6, 9, 12, 15, 18, 21 and 24 are multiples of ...  
 A 3.  
 B 6.  
 C 9.  
 D 12.
- 9  $5^3$  can also be written as ...  
 A  $3 \times 3 \times 3 \times 3 \times 3.$   
 B  $3 + 3 + 3 + 3 + 3.$   
 C  $5 + 5 + 5.$   
 D  $5 \times 5 \times 5.$
- 10 Express the ratio 5kg to 25kg in its lowest terms.  
 A 5 to 1  
 B 1 to 5  
 C 4 to 1  
 D 1 to 4
- 11 A company bought 759 pockets of cement in one shop and 456 pockets in another shop. How many pockets of cement did the company buy altogether?  
 A 1 215  
 B 1 205  
 C 1 115  
 D 1 105
- 12  $1.41 + 5.97 + 15.048 =$   
 A 21.328  
 B 21.428  
 C 22.328  
 D 22.428

- 13 If  $24 + x \leq 30$ , the value of  $x$  is ...
- A  $x \leq 6$ .
  - B  $x \leq 24$ .
  - C  $x \leq 30$ .
  - D  $x \leq 54$ .
- 14 What is  $\frac{4}{5}$  of  $\frac{2}{3}$ ?
- A  $\frac{22}{15}$
  - B  $\frac{6}{5}$
  - C  $\frac{8}{15}$
  - D  $\frac{2}{15}$
- 15 Machipisa sold all his goods at a discount of 10%. What was the discount on a dress which he was selling at K800.00?
- A K50.00
  - B K60.00
  - C K70.00
  - D K80.00
- 16 Musonda had 21 eggs in a box. If  $y$  eggs are broken and 17 eggs are not. Find the value of  $y$ .
- A 3
  - B 4
  - C 17
  - D 38
- 17 Find the Highest Common Factor of 12 and 18.
- A 2
  - B 3
  - C 6
  - D 9
- 18 Find the mode of 14, 10, 10, 7, 8, 14, 16, 19, 10 and 13.
- A 7
  - B 10
  - C 14
  - D 19

19  $3\frac{2}{5} + \frac{1}{5} =$

A  $1\frac{2}{5}$

B  $1\frac{4}{5}$

C  $3\frac{1}{5}$

D  $3\frac{3}{5}$

- 20 A bicycle was bought at K750.00 and was later sold at K645.00. Find the loss that was made.

A K1 395.00

B K645.00

C K105.00

D K100.00

- 21 If Set A = {2, 3, 5, 7, 9} and Set B = {1, 2, 3, 5}, list  $A \cap B$ .

A {2, 3}

B {2, 3, 5}

C {1, 2, 3}

D {1, 2, 3, 5, 7, 9}

- 22 Mutale had \$28. He bought a shirt and a pair of shoes and his change was \$3. How much did he spend?

A \$84

B \$31

C \$28

D \$25

23  $\frac{2}{3} - \frac{1}{8} =$

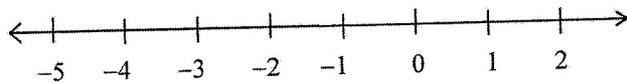
A  $\frac{13}{24}$

B  $\frac{15}{24}$

C  $\frac{17}{24}$

D  $\frac{19}{24}$

- 24 A regular polygon with four sides is called a ...  
A trapezium.  
B square.  
C rhombus.  
D parallelogram.
- 25 Matemba bought 16.52kg of beef. Write the mass of beef to one decimal place.  
A 17.0kg  
B 16.6kg  
C 16.5kg  
D 16.0kg
- 26 Find the mean of 90, 80 and 40.  
A 40  
B 70  
C 80  
D 90
- 27 Look at the number line below.



- Which of the numbers are greater than  $-1$ ?
- A 0, 1, 2  
B  $-2, -3, -4$   
C  $-1, 0, 1$   
D  $-2, -1, 0$
- 28  $1211_{\text{five}} + 2344_{\text{five}} =$   
A  $4\ 610_{\text{five}}$   
B  $4\ 110_{\text{five}}$   
C  $4\ 000_{\text{five}}$   
D  $1\ 610_{\text{five}}$
- 29 The Lowest Common Multiple of 8, 9 and 12 is ...  
A 72.  
B 56.  
C 48.  
D 24.
- 30  $897 \div 23 =$   
A 1 120  
B 874  
C 309  
D 39

31 Mubita covered a distance of 280km in 4 hours. At what speed was he driving?

- A 70km/h
- B 276km/h
- C 285km/h
- D 1 120 km/h

32 Arrange the Roman numerals below from the smallest to the biggest.

XV, LV, XI

- A LV, XV, XI
- B LV, XI, XV
- C XI, XV, LV
- D XV, XI, LV

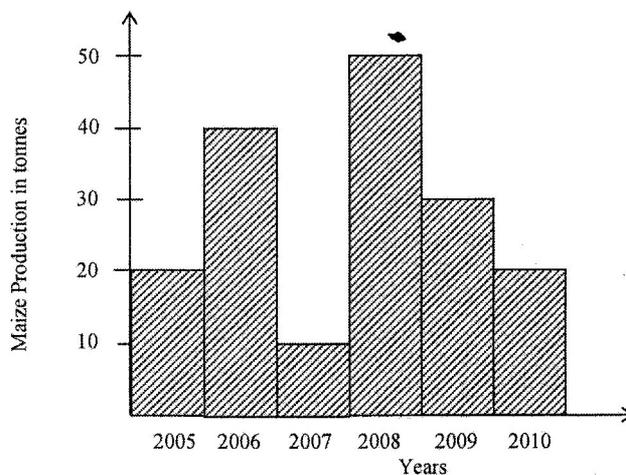
33 Find the volume of a cuboid of length 7cm, breadth 5cm and height 3cm.

- A  $35\text{cm}^3$
- B  $36\text{cm}^3$
- C  $95\text{cm}^3$
- D  $105\text{cm}^3$

34 If 2 shirts cost K150.00, how much will 12 shirts of the same type cost?

- A K900.00
- B K450.00
- C K150.00
- D K75.00

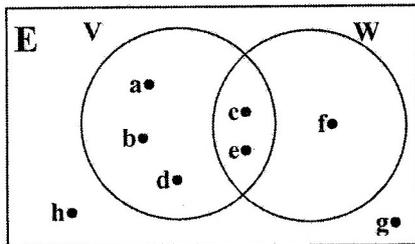
35 The bar chart below shows the production of maize at a farm from 2005 to 2010.



What is the difference between the tonnes of maize produced in 2007 and 2008?

- A 10 tonnes
- B 40 tonnes
- C 50 tonnes
- D 60 tonnes

- 36 Chipo had K200.00. She bought a dress at K70.00 and shoes at K60.00. How much money did she remain with?  
 A K140.00  
 B K130.00  
 C K70.00  
 D K10.00
- 37 Wezi had 40 oranges and he sold  $\frac{3}{4}$  of them. How many oranges did he sell?  
 A 10  
 B 30  
 C 60  
 D 120
- 38  $1.97 \times 2.4 =$   
 A 472.8  
 B 47.28  
 C 4.728  
 D 0.4728
- 39 Look at the Venn diagram below.

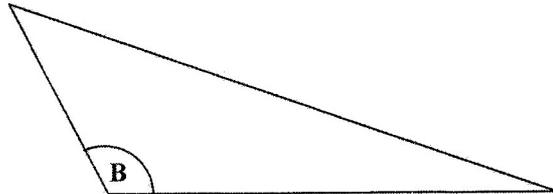


- The set  $V \cup W$  is ...  
 A {c, e}.  
 B {c, e, f}.  
 C {a, b, c, d, e, f}.  
 D {a, b, c, d, e, f, g, h}.
- 40 Find 40% of 200.  
 A 90  
 B 160  
 C 500  
 D 8 000
- 41 An amount of K360.00 was shared among three children in the ratio 2 to 3 to 4. How much was the smallest share?  
 A K40.00  
 B K80.00  
 C K120.00  
 D K160.00

42 Convert  $102_{\text{five}}$  to base 10.

- A 10
- B 12
- C 17
- D 27

43 The angle marked B in the triangle below is called ...



- A an acute angle.
- B a right angle.
- C an obtuse angle.
- D straight angle.

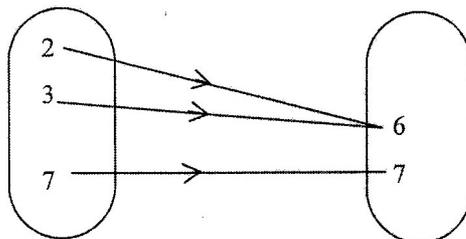
44  $559 \times 63 =$

- A 34 117
- B 34 217
- C 35 117
- D 35 217

45 Express 16% as a decimal.

- A 16.0
- B 1.6
- C 0.16
- D 0.016

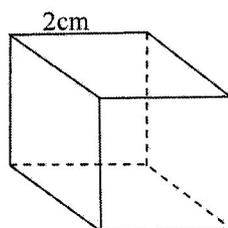
46 The mapping below is called a ...



- A one-to-one mapping.
- B one-to-many mapping.
- C many-to-one mapping.
- D many-to-many mapping.

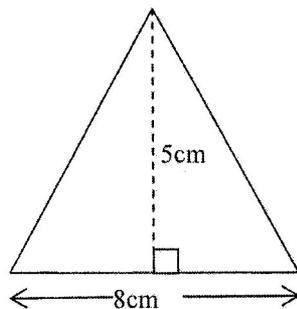
- 47 A farmer planted cabbages in 9 rows. Each row had 108 cabbages. How many cabbages were planted altogether?  
A 972  
B 117  
C 99  
D 12
- 48  $13.5 - 7.82 =$   
A 6.78  
B 6.68  
C 5.78  
D 5.68
- 49 Convert 73 to a base 8 number.  
A  $910_{\text{eight}}$   
B  $112_{\text{eight}}$   
C  $111_{\text{eight}}$   
D  $110_{\text{eight}}$
- 50 How many faces does a cube have?  
A 8  
B 6  
C 4  
D 2
- 51 A chitenge material of length 10.4m is cut into 4 equal pieces. Find the length of each piece.  
A 14.8m  
B 10.6m  
C 2.6m  
D 2.1m

- 52 Find the total length of the edges of the cube below.



- A 32cm  
B 24cm  
C 18cm  
D 16cm
- 53 3 335 to the nearest hundred is ...  
A 3 340.  
B 3 330.  
C 3 300.  
D 3 000.

- 54 Convert \$1 350 to Zambian Kwacha, given that the exchange rate is \$1 = K8.50.
- A K1 341.50  
B K1 358.50  
C K10 475.00  
D K11 475.00
- 55 If 15% of a class of 40 learners go to school by bus, how many learners in the class use a bus?
- A 6  
B 15  
C 25  
D 34
- 56 Calculate simple interest on K20 000.00 invested for 3 years at 5% per annum.
- A K30 000.00  
B K3 000.00  
C k300.00  
D K30.00
- 57 Find the value of  $4^2$ .
- A 2  
B 6  
C 8  
D 16
- 58 Set B = {a, b, c}. How many subsets does Set B have?
- A 8  
B 7  
C 6  
D 3
- 59 Using  $\pi = 3.14$ , calculate the area of a circle of radius 4cm.
- A 12.46cm  
B 12.56cm  
C 25.12cm  
D 50.24cm
- 60 Find the area of the triangle below.



- A  $40\text{cm}^2$   
B  $20\text{cm}^2$   
C  $13\text{cm}^2$   
D  $10\text{cm}^2$

STOP PLEASE CHECK ALL YOUR WORK CAREFULLY