

# General Professional Knowledge -Numeracy

## SECTION

**THIS TEST CONSISTS OF 60 MULTIPLE CHOICE QUESTIONS WITH FOUR OPTIONS LETTERED A to D.  
READ AND EVALUATE ALL FOUR ANSWER CHOICES BEFORE CIRCILING THE BEST ANSWER.**

1. A car left Ejisu at 10:45a.m. It arrived in Kumasi some 35 minutes later. At what time did the car arrive in Kumasi? A. 11:20 p.m.  
B. 11:30 a.m.  
C. **11:20 a.m.**  
D. 11:20 p.m.
2. How many 300 millilitre bottles of fruit juice will be required to fill a 1.5 liters container? A. 2  
B. 9  
C. **5**  
D. 6
3. An athlete runs 3 times around a rectangular football pitch whose dimensions are 110 metres by 75 metres. What distance did he run?  
A. **1,110m**  
B. 1,185m  
C. 1,056m  
D. 1010m
4. Mansa gave Yaw a gift in box whose volume is 49 cubic inches. How high is the box if the base has the dimensions  $3\frac{1}{2}$  inches by  $3\frac{1}{2}$  inches?  
A. 7  
B. 4  
C. 3  
D. 14
5. An egg seller bought a crate of eggs (30) for GHC18.00. If five of the eggs were spoilt and she sold each for GHC1.20. What is her selling price?  
A. GH ₵20.00  
B. GH ₵30.00  
C. GH ₵35.00  
D. GH ₵25.00
6. Which of the following angles can form the interior angles of a triangle?  
A. 50, 50, 45  
B. 30, 40, 50  
C. 40, 40, 80  
D. 30, 60, 90

7. If 12 students can weed a portion of a school field in 5 hours, how long would it take 15 students at the rate to weed the same portion?
  - A. 3hrs
  - B. 4hrs
  - C. 6hrs
  - D. 7hrs
  
8. Children are at school from 8:00am to 3:30pm. They have two breaks; the first break is 20 minutes and the second one is lunch break which is 40 minutes. What is the percentage of the school day is allocated to breaks?
  - A. 0.133333
  - B. 0.01333
  - C. 13.333%
  - D. 13.3.33%
  
9. Which of the following is the smallest number that 5, 3 and 6 can divide exactly?
  - A. 30
  - B. 18
  - C. 15
  - D. 45
  
10. In a mathematics test conducted in a class, Kofi scored 25 marks less than Kwame's score. The sum of their marks is 135. What mark did Kwame score?
  - A. 80
  - B. 65
  - C. 55
  - D. 70
  
11. Which of the following strategies is correct for finding the cost of 98 shirts at GHC19.00 per shirt?
  - A.  $1900+38$
  - B.  $1900-38$
  - C.  $1900+36$
  - D.  $1900-36$
  
12. Owusu and Fosu to share were 65 oranges so that Owusu has 7 oranges less than Fosu?
  - A. 29 oranges
  - B. 36 oranges
  - C. 33 oranges
  - D. 58 oranges

- 13.** If the median of the set of numbers 13, 18, 22, 13, 15, , 7 is 14. What is the value of y? A. 15  
B. 13  
C. 22  
D. **14**
- 14.** A student's average score in four papers in a monthly test was 60.5. The scores in the first three papers were 72%, 58% and 68% respectively. What was the student's score in the fourth paper?  
A. 44  
B. 45  
C. 54  
D. 46

Use the information below to answer questions 15-16

- 15.** The following show the outcomes of an experiment involving the throwing of a die for 20 times in the classroom; 1, 2, 4, 3, 6, 5, 2, 1, 3, 4, 5, 6, 7, 5, 4, 1, 4, 7, 8, 2.  
What is the probability of having 1 as an outcome of the experiment selected?  
A.  $\frac{3}{20}$   
B.  $\frac{1}{17}$   
C.  $\frac{3}{17}$   
D.  $\frac{1}{20}$
- 16.** What is the probability of having 2 as an outcome of the experiment selected?  
A.  $\frac{3}{20}$   
B.  $\frac{3}{17}$   
C.  $\frac{6}{20}$   
D.  $\frac{4}{20}$

Use the information below to answer questions 17 to 18

A high school purchased a new machine for GHC24,000.00. The school estimate that the equipment decreases in value by the same amount each year.

- 17.** If the estimated value is GHC15,000.00 after 3 years, how much is the decrease in value per year  
A. GHC3,000.00  
B. GHC5,000.00  
C. GHC7,000.00  
D. GHC9,000.00

18. What is the estimated value of the printer after five years?
- A. GHC3,000.00
  - B. GHC5,000.00
  - C. GHC7,000.00
  - D. GHC9,000.00
19. A club coordinator spends 30 minutes each week preparing for the club's meeting and participates in the club's meetings on Tuesday and Thursdays. If each meeting day lasts 30 minutes, how many hours does the club's coordinator devote to the club's activities over a 10-week period?
- A. 10hrs
  - B. 15hrs
  - C. 12hrs
  - D. 13hrs
20. A printing press has 500 boxes of A4 sheets and used 150 boxes to print some work. What percentage of the boxes are left?
- A. 70%
  - B. 60%
  - C. 75%
  - D. 40%
21. Which of the following angles can be the interior angles of a triangle?
- A. 30, 40, 50
  - B. 30, 60, 90
  - C. 40, 40, 80
  - D. 50, 50, 45
22. Akos made 2.4 liters of vegetable cooking oil. She poured it into 5 jars of the same size. If each jar was filled to brim, what was the capacity of each jar?
- A. 240ml
  - B. 480ml
  - C. 500ml
  - D. 490ml
23. The average of 3 friends is 14. When a new person joined this friend's group, the average age became 15. What is the age of the new person?
- A. 18
  - B. 17
  - C. 60
  - D. 42

24. There are 22 boys and 18 girls in a classroom. A student is selected at from the classroom, what is the probability that a girl will be selected?
- A. 18/40
  - B. 9/10
  - C. 1/10
  - D. 22/40
25. If the price of a shirt costing GHC120.00 is increased by 10, what will be the new price?
- A. GHC132.00
  - B. GHC122.00
  - C. GHC110.00
  - D. GHC100.00
26. What is the angle between the hour hand and minutes hand at 5 O'clock?
- A. 150<sup>°</sup>
  - B. 120<sup>°</sup>
  - C. 110<sup>°</sup>
  - D. 130<sup>°</sup>
27. Which one of the following measures of central tendency is most appropriate for nominal data?
- A. mode
  - B. mean
  - C. median
  - D. range
28. Efua, Aku and Felicia shared an amount of GHC14,000.00 among themselves. Efua had GHC2500.00 ana Aku had twice as Efua, how much did Felicia get?
- A. GHC6,500.00
  - B. GHC5,000.00
  - C. GHC9,000.00
  - D. GHC6,000.00
29. Afia, Esi and Korkor shared a certain amount of money. Afia received GHC160.00, Esi received GHC200.00 and Korkor received GHC100.00. Express their shares in a form of ratios?
- A. 18:13:16
  - B. 19:12:15
  - C. 8:12:5

D. 18:2:5

- 30.** A man shared GHC720,000.00 for his 3 children in the ratio of 11:15:10. Find the highest share?
- A. GHC300,000.00
  - B. GHC250,000.00
  - C. GHC350,000.00
  - D. GHC400,000.00
- 31.** The weight in (kg) of eight teachers in a school are follows: 67, 72, 96, 76, 85, 60, 91, 80. Calculate the average weight.
- A. 75.38
  - B. 78.38
  - C. 77.39
  - D. 78.39
- 32.** In a class of 50 students comprising of 13 girls and some boys what is the chance of selecting a boy from this class?
- A.  $\frac{37}{50}$
  - B.  $\frac{2}{50}$
  - C.  $\frac{7}{50}$
  - D.  $\frac{13}{50}$
- 33.** The cost of an exercise book in 2021 was GHC1.20. In 2022 the cost was increased by 15%, what is the new price?
- A. GHC1.38
  - B. GHC1.28
  - C. GHC1.40
  - D. GHC1.50

Use the Information below to answers question 34-36.

In a final football match the ratio of children to adult spectators were 3:2. There are 120 children and 80 adults. Each adult ticket is GHC9.00 and the children ticket is one third of the adult ticket.

- 34.** What is the total revenue generated from sales of children ticket?
- A. GHC360
  - B. GHC380
  - C. GHC120
  - D. GHC108
- 35.** What is the ratio of children revenue to adult revenue?
- A. 360:720
  - B. 1:2
  - C. 18:36
  - D. 380:720
- 36.** What is the total revenue generated from children and adult ticket sales?
- A. GHC1080
  - B. GHC1100
  - C. GHC1200
  - D. GHC1808
- 37.** Abena has 13 pebbles of chocolate. She gave 2 to Sarkodie and 3 to Mummy. Which of the following expressions represents the pebbles left?
- A.  $13-(2+3)$
  - B.  $13-(2-3)$
  - C.  $13-(2-2-3)$
  - D.  $13-(2*3)$
- 38.** The following a scores obtained by students in a class test:2,2,2,2,2,3,3,4,4,4,4,5,5. What the is ratio of the mode to the median of the distribution?
- A. 2:3
  - B. 3:2
  - C. 5:4
  - D. 4:5

- 39.** Mr. Nkrumah has rectangular garden with dimension 25m wide and 15m long. He has a 78m long wire to fence the field leaving a distance “d” for gate. Find the value of “d”.
- A. 2m
  - B. 80m
  - C. 297m
  - D. 21m
- 40.** A truck can carry 150kg of maize at a time. If the truck is assigned to convey a pile of maize of mass 1250kg, how many times will it take the truck to convey all the maize? A. 8.3 B. 8.0 C. 9.3 D. 9.0
- 41.** Mrs. Appiagyei walks around a rectangular football field of sides 120m by 100m every morning. If she walked around the field two times, what will be the distance covered?
- A. 440m
  - B.  $440\text{m}^2$
  - C. 880m
  - D.  $880\text{m}^2$
- 42.** The length of a rectangular swimming pool is 2 meters more than its width. If the perimeter of the pool is 64m, what is its length?
- A. 15m B. 20m C. 17m
  - D. 14m
- 43.** What is the length of a side of a square with area  $81\text{cm}^2$ ?
- A. 27
  - B. 9
  - C. 36
  - D. 8

- 44.** Fifty percent of the people in a village speak Akan and seventy-five percent speak Dangbe. Some speak both languages. No other language is spoken in the village. What is the percentage of the people in the village that speak both Akan and Dangbe?
- A. 25% B. 45% C. 35%  
D. 55%
- 45.** The morning session in a school started 8:55am. Registration lasted for 25 minutes and there were two lessons of 40 minutes before break time. At what time did the break start?
- A. 10:40 a.m.  
B. 9:40 a.m.  
C. 10:45 a.m.  
D. 9:45 a.m.
- 46.** A water tank is a cube of side 2 meters. What is the volume of water in the tank if it is half-full?
- A.  $4.0 \text{ m}^3$   
B.  $8.0 \text{ m}^3$   
C.  $24 \text{ m}^3$   
D.  $2.4 \text{ m}^3$
- 47.** Which one these shapes is a regular polygon?
- A. Rectangle  
B. Trapezium  
C. Parallelogram  
D. Square
- 48.** A parent invited 12 children to her daughter's birthday party. She has a box containing 129 toffees. What is the smallest number of toffees that must be added so that each child has the same number?
- A. 3 B. 4  
C. 2  
D. 5

49. Akosua bought a bag of rice at a retail price of GHC300.00 and sold it at a percentage profit of 10%. How much did she sell it for?
- A. GHC310.00 B. GHC330.00 C. GHC350.00  
D. GHC360.00
50. A 10000m cross country running course has nine drink stations. The distance between the start point and station 1, between the stations themselves and between station 9 and the finish point are all equal. What is the approximate distance between each drink station?
- A. 909m  
B. 1111m  
C. 1000m  
D. 833m
51. When a fridge cools water from temperature of 24°C to -5°C, how many degrees has the temperature gone down?
- A. 10°C  
B. 9°C  
C. 29°C  
D. 21°C
52. Musa spends  $\frac{2}{5}$  of his income on food,  $\frac{1}{4}$  on rent and the rest as bank savings. Which of the following fractions represents his bank savings?
- A.  $\frac{11}{20}$   
B.  $\frac{9}{20}$   
C.  $\frac{13}{20}$   
D.  $\frac{7}{20}$
53. What is the place value of the digit 3 in the numeral, 1.5321?
- A. Hundredths  
B. Hundred  
C. Tenths  
D. Ten

54. The probability that Gerard passes an exam is  $\frac{4}{5}$ . What is the probability of he failing?  
A.  $\frac{1}{5}$  B.  $\frac{2}{5}$  C.  $\frac{3}{5}$   
D.  $\frac{5}{5}$
55. In a district, 60% of the teachers are females, if there are 180 males teachers, what is the total number of teachers in the district?  
A. 540 B. 270 C. 380  
D. 450
56. If 30 workers contributed equal amount totaling GHC4500.00 towards the send-off ceremony in honour of their head of an institution, how much will 50 workers contribute?  
A. GHC90.00  
B. GHC7500.00  
C. GHC150.00  
D. GHC8500.00
57. What is 78,910 to the nearest thousand?  
A. 70,000 B. 78,000 C. 80,000  
D. 79,000
58. Ama is 15 years. If trice Joan's age is added to Ama's age is equal 75 years. How old is Joan? A. 25 years B. 30 years C. 15 years D. 20 years
59. When 3 is subtracted from two times a certain number the results is 7. What is the number? A. 3 B. 4 C. 5  
D. 6
60. Vida, seamstress, started sewing a dress at 9:45a.m. She completed the dress at 12:30p.m. How long did she spend on the job?

- A. 2 hrs 15 mins
- B. 2 hrs 30 mins C. 2 hrs 45 mins
- D. 2 hrs 15 mins