## **ACHIEVERS FOCUS EXAMINATION SERIES**



## STANDARD 7 – 2021 MATHEMATICS

AF2005

Time: 2 hours

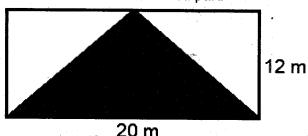
- What is seven million seven hundred and seventy-seven thousand and seventy-seven in figures?
  - A. 7777777
  - B. 777777
  - C. 7777077
  - D. 0.7077077
- 2. How many hundreds are there in the total value of digit 6 in the number 986754213?
  - A. 600000
  - B. 60000
  - C. 6000
  - D. 600
- 3. What is the area of a rectangle whose perimeter is 64cm and one of the side is 12cm?
  - A. 20cm<sup>2</sup>
  - B. 240cm<sup>2</sup>
  - C. 624cm<sup>2</sup>
  - D. 768cm<sup>2</sup>
- 4. Round off 989743 to the nearest thousands.
  - A. 990000
  - B. 989000
  - C. 1000000
  - D. 999000
- 5. What is the highest common factor of 36, 54 and 72?
  - A. 216
  - B. 144
  - C. 108
  - D. 18
- 6. A bus left members at 2225hrs and arrived at Voi at 1.05am. How long did the journey take?
  - A. 21hrs 20mins
  - B. 2hrs 40mins
  - C. 22hrs 20mins
  - D. 2hrs 35mins
- 7. Simplify

81×9.1×9.8

2.7×1.3×0.7

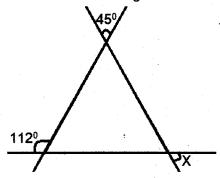
- A. 294
- B. 2940
- C. 29.4
- D. 29400

- 8. Mwalimu bought an item and later sold it at 2550/=. Making a loss of 15%. What was his loss?
  - A. Sh. 382
  - B. Sh. 450
  - C. Sh. 300
  - D. Sh. 575
- 9. A river 5km represented on a map using a scale of 1:500000. What is the length of the River on a map?
  - A. 0.5cm
  - B. 0.5km
  - C. 1km
  - D. 1cm
- 10. Nelima covered a distance of 100m in 10 seconds. What was her speed in km/h?
  - A. 10km/h
  - B. 36km/h
  - C. 30km/h
  - D. 18km/h
- 11. Convert 600ml into deciliters
  - A. 60dl
  - B. 6dl
  - C. 0.6dl
  - D. 6000dl
- 12. Convert 0.375 into percentage.
  - A. 3.75%
  - B. 0.375%
  - C. 0.0375%
  - D. 37.5%
- 13. Find the area of the shaded part.

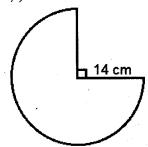


- A. 242cm<sup>2</sup>
- B. 120cm<sup>2</sup>
- C. 120m<sup>2</sup>
- D. 240m<sup>2</sup>

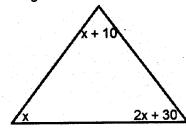
14. What is the measure of angle x?



- A. 157°
- B. 68°
- C. 67°
- D. 113°
- 15. Find the perimeter of the shape drawn below  $\left(\pi = \frac{22}{7}\right)$



- A. 94cm
- B. 13cm
- C. 66cm
- D. 80cm
- 16. Express 0.125 as a fraction in its simplest form.
  - A.  $\frac{1}{80}$
  - B.  $\frac{1}{4}$
  - C.  $\frac{1}{8}$
  - D.  $\frac{1}{800}$
- 17. What is the difference between the largest and smallest angle?



- A. 50°
- B. 80°
- C. 40°
- D. 10°

- 18. Express 4(2b a) 56 + 6a in simplest form.
  - A. 3b 10a
  - B. 3b + 2a
  - C. 13b + 2a
  - D. 3b 2a
- 19. Work out  $\frac{8^2+8}{4} 8$ 
  - A. 16
  - B. 10
  - C. 56
  - D. 2
- 20. What is the square-root of 0.0576?
  - A. 0.24
  - B. 0.26
  - C. 2.6
  - D. 2.4
- 21. Find the sum of all prime numbers between 80 and 90.
  - A. 164
  - B. 172
  - C. 213
  - D. 170
- 22. Arrange the fractions  $\frac{2}{3}$ ,  $\frac{7}{8}$ ,  $\frac{4}{5}$ ,  $\frac{5}{6}$  in ascending order.
  - A.  $\frac{2}{3}, \frac{4}{5}, \frac{5}{6}, \frac{7}{8}$
  - B.  $\frac{7}{8}, \frac{5}{6}, \frac{4}{5}, \frac{2}{3}$
  - C.  $\frac{5}{6}$ ,  $\frac{4}{5}$ ,  $\frac{2}{3}$ ,  $\frac{7}{8}$
  - D.  $\frac{7}{8}, \frac{2}{3}, \frac{5}{6}, \frac{2}{3}$
- 23. Solve the equation for t

$$6\left(\frac{1}{2}t+1\right)=15$$

- A. 3
- B.  $2\frac{1}{3}$
- C.  $3\frac{1}{3}$
- D. 7
- 24. How many 50kg bags can be packed from a load of 300 tones?
  - A. 60
  - B. 6000
  - C. 600
  - D. 6

- 25. What is the smallest number that can be added to 89645 to make it divisible by 11?
  - A. 6
  - B. 5
  - C. 3
  - D. 7
- 26. The mean of 6 numbers is 5.5. Five of the numbers are 2, 4, 8, 4 and 10. What is the sixth number?
  - A. 33
  - B. 4
  - C. 5
  - D. 28
- 27. Wanjiru bought the following
  - $2\frac{1}{2}$ kg of sugar @ 100.00
  - 3kg rice @ 90.00
  - 2kg of meat for 180.00
  - 1 ½kg of flour at 80 per kg

If she paid using 5 - two hundred-shilling notes, what balance did she receive?

- A. Sh.180
- B. Sh.820
- C. Sh.280
- D. Sh.720
- 28. Find the first number in the pattern.
  - , 11, 17, 29, 53

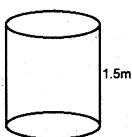
  - B. 8
  - C. 3
  - D. 5
- 29. How many days are there from 15th March to 15<sup>th</sup> Aug?
  - A. 152
  - B. 154
  - C. 133
  - D. 132
- 30. Which statement is correct?
  - A.  $\frac{5}{12}$  is greater than 0.46
  - B.  $\frac{5}{12}$  is less than 0.46
  - C.  $\frac{3}{12}$  is equal to 0.46
  - D. 0.46 is greater than  $\frac{5}{12}$

- 31. What is the difference of GCD and LCM of 30, 45 and 60?
  - A. 165
  - B. 175
  - C. 195
  - D. 155
- 32. Which measurements will form a right-angle triangle?
  - A. 6cm, 8cm, 10cm
  - B. 3cm, 5cm, 7cm
  - C. 8cm, 16cm, 17cm
  - D. 9cm, 24cm, 25cm
- 33. Complete the statement below.

A right angle acute angle.

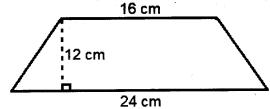
- B. =
- C. <
- D. ≅
- 34. What is 120% of 600?
  - A. 120
  - B. 720
  - C. 480
  - D. 660
- 35. Onyango spent sh.17.50 on stamps. If each stamp was worth 70 cents. How many stamps did he buy?
  - A. 25
  - B. 35
  - C. 15
  - D. 45
- 36. Increase 80 by 20%
  - A. 170B. 272

  - C. 96
  - D. 186
- 37. The volume of a cylinder below is 9.24m<sup>3</sup>. If the height is 1.5m, what is the diameters of the container?

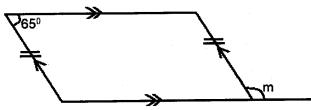


- A. 1.4m
- B. 5.6m
- C. 2.8m
- D. 11.2m

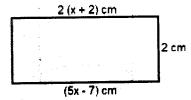
- 38. Multiply 12hrs 45mins by 4
  - A. 51hrs
  - B. 49hrs 3mins
  - C. 49hrs 50mins
  - D. 63hrs
- 39. Pupils in Rongo School took 2dl of milk each. How many pupils took 85liters of milk?
  - A. 425
  - B. 525
  - C. 625
  - D. 725
- 40. Find the area of trapezium.



- A. 480cm<sup>2</sup>
- B. 240cm<sup>2</sup>
- C. 320cm<sup>2</sup>
- D. 360 cm<sup>2</sup>
- 41. What is 11,300 divided by 25?
  - A. 4052
  - B. 40502
  - C. 452
  - D. 4520
- 42. What is the size of angle m?

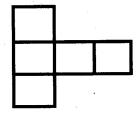


- A. 120°
- B. 165°
- C. 65°
- D. 115°
- 43. Find the perimeter.



- A. 3cm
- B. 16cm
- C. 10cm
- D. 20cm

- **44**. What is the value of  $5(8^2 + 7^2) + 81 \div 9$ 
  - A. 113
  - B. 565
  - C. 745
  - D. 574
- 45. The figure below represents a net of a solid. The net is for;



- A. Triangular prism
- B. Open cube
- C. Closed cube
- D. Square based prism
- 46. Given that a = 5, b = 3, c = 4. What is the value of 2(2a + c) 3(b + a)
  - A. 7
  - B. 1
  - C. 4
  - D. 52
- 47. Maria received sh.9000 as a commission for sales worth sh.50,000. Calculate her percentage commission.
  - A. 8%
  - B. 16%
  - C. 6%
  - D. 18%
- 48. Macharia deposited sh.92,000 in a bank that paid simple interest at the rate of 8% p.a. How much money was in her account at the end of 2 years?
  - A. Sh.106,720
  - B. Sh.102.900
  - C. Sh.98,320
  - D. Sh.14,720
- 49. What is the product of the faces and vertices of a square based prism?
  - A. 48
  - B. 30
  - C. 40
  - D. 36
- 50. Find the square root of  $\sqrt{0.0625}$ 
  - A. 0.25
  - B. 0.5
  - C. 0.025
  - D. 0.05