FIRST TERM MATHS EXAM QUESTIONS JSS1 – 3

MATHEMATICS JSS1

1. Express 1.80 as a fraction in its lowest term A. 9/50 B. 1 C. 1 D. 1
2. What is the value of 6 in 4320.614? A. 6 units B. 6 tens C. 6 tenth D. 6 hundredth
3. What is 58 in Roman Numerals? A. LVII B. LVIII C. LXIII D. LXVIII
4. Find the LCM OF 3, 8 and 12 A. 3 B. 8 C. 12 D. 24
5. Write in figure: six hundred and fifty eight million, one hundred and twenty five thousand and one. A. 658,125,100 B. 658,125,101 C. 658,125,001 D. 658,125,000
6. Divide 2408 by 4 A. 64 B. 801 C. 62 D. 602
7. The value of 9 in 2984 is A. 9 units B. 9 tens C. 9 hundreds D. 9 thousand
8. Express the fraction 42/70 in its lowest term A. 5/3 B. 4/7 C. 3/5 D. 6/10
9. Express 41/5 as a mixed A. B. C. 4D. 8
10. Simplify 5/6 +3/8 A. 1 B. 24/29 C. 5/24 D. 5/24
11. The value of the 3 in 24.635 is

A. 3 thousandths B. 3 Hundredths C. 3 tenths D. 3 units

1. The HCF of 24 and 60 is

A. 2 B. 3 C. 4 D. 12

1. A distance of 3km and 29m, expressed in metre is

A. 3.029 B. 3.29 C. 3290 D. 3029

2, 4, 5 and 3

3, 5, 6 10

1. The lowest common denominator of

A. 15 B. 30 C. 50 D. 60

1. Four pages of a 16 page newspaper are missing. The percentage missing is

A. ¼ B. 4 C. 10 D. 25

1. The Roman numeral CXCIV represents the number

A. 194 B. 196 C. 214 D. 215

1. The value of 62 is

A. 12 B. 24 C. 26 D. 36

1. 5300ml expressed in litres is

A. 0.053 B. 0.53 C. 5.3 D. 530

1. The number of minutes in 1½ hours is

A. 30 B. 45 C. 65 D. 90

1. Which one of the following is not equivalent to ½?

A. 9/18 B. 11/22 C. 15/30 D. 24/42

1. If 51/7 is expressed as an improper fraction its numerator will be

A. 8 B. 12 C. 13 D. 36

1. To express the fraction 30/48 in its lowest terms, divide the numerator and denominator by

A. 2 B. 3 C. 5 D. 6

1. 13.45 minutes, expressed as a fraction of one hour is

A.1/60 B. 5 ¼ C. ¾ D. 4/5

1. 14.S/24, expressed as a percentage, is

A. 4% B. 6 ¼ % C.8% D. 16%

25. 67.0s3 to the nearest tenth is

A. 70 B. 67 C. 67.0 D. 67.1

26. 41285 = 41300 to the nearest

A. Ten thousand B. Thousand C. Hundred D. Whole number

27. Select the correct answer to the following 1200 ÷ 0.04 =

A. 30000 B. 3000 C. 300 D. 30

28. Which of the following numbers is the greatest?

A. -2 B**. - 30 C. -100 D. - 50**

29 .What is the value of 9 x 2 -2 ÷ 2 + 2?

A. - 49 B. -18 C. 5 D. 14

30. Which of the following is 20% of I hour?

A. 5min B. 6min C. 12min D. 20min

31. Simplify ¼ + 1/3

A. 12/7 B. 7/12 C. 1/7 D. 1/12

32.Simplify 5/6  ÷ 2/3

A. 4/5 B. 5/4 C. 3/5 D. 3/4

33.Write 0.0007896 in standard form

A. 7896 x 10-4 B. 78.96 x 10-7 C. 7.896 x 10-4 D. 7.896 x 10-4

54

96

=

16

34. Find the missing number

A. 4 B. 6 C. 8 D. 9

35.Express 5893.2711 in standard form

A. 5.893271 x 10-3 B. 5.89 x 103 C. 58932.71 D.5.89 x 104

36.Write 2.841 x 10̄⁴ as an ordinary number

A. 0.002841 B. 0.0002841 C. 0.00002841 D. 0.02841

37. Express 72 as a product of its prime factors

A. 23 x 32 B. 33 x 23 C. 22 x 34 D. 24 x 33

38.Which of these fractions is correctly arranged in descending order

A. ¾, 2/3, 5/8, 7/12 B. 7/12, 2/3, 5/8 ¾ C. 2/3, 5/6, 7/12, ¾

D. 2/3, ¾, 5/8, 7/12

39. If 200 = 2.00 x 10n, what is the value of n?

A. 0 B. 1 C. 2 D. -2

40. Find the value of 0.8 x (0.17 – 0.09)

A. 0 .64 B. 6.4 C. 0.064 D. 0.0064

41. 480 Hundredth in decimal fraction is

A. 48.0 B. 0.48 C. 4800 D. 4.80

42. What is two fifth of 34/7 ?

A. 7/10 B. 3/7 C. 13/7 D. 3 1/7

43. Change 92% to a fraction

A. 23/25 B. 0.92 C. 24/25 D. 22/25

44. Change 5/8 to a decimal fraction

A. 0.58 B. 0.265 C. 0.658 D. 0.625

45. Express 37 as a percentage of 50

A. 74% B. 72% C.82% D. 79%

46. Expressed as a product of its prime factors A

1. 32 x5 B. 23 x3 C. 23x32 D. 24x32
2. What is the square of 15?
3. 225 b. 125 c. 625 d. 30
4. The HCF of 28 and 42 is

a.2 b. 7 c. 14 d. 28

49. The LCM of 10 and 15 is

a. 30 b. 150 c.5 d.10

50. Change 0.55 to a fraction in its lowest term

a. 55/100 b. 11/25 c. 11/20

THEORY

1. Write Thirteen billion, seven hundred and two in figure: (b) write in 3 123 438 148 in word (c) write 1 billion in full
2. Given 8257.631, state the place of each digit in the number under the appropriate column

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Hth | Tth | Th | H | T | U | . | tenth | hundredth | thousandth |
|  |  |  |  |  |  |  |  |  |  |

1. Arrange the following in ascending order of magnitude 2 576 895, 257 895, 2 600 120, 2 062 001, 10 000 003 and 967 599
2. Arrange the following fractions in ascending order of magnitude (a) 1/3, 2/5, 7/6, 13/15 (b) 2/3, ½, 7/8, ¼ (c) ¾ dozens of pencils is =
3. Circle all the prime numbers from the set of numbers given below

1 2 3 4 5 6 7 8 9

11 21 31 41 51 61 71 81 91

13 23 33 43 53 63 73 83 93

17 27 37 47 57 67 77 87 97

(b) Find the HCF of 72 and 84

5. Find the LCM 24, 36 and 42 (b) Express the following numbers in index form (i) 200 (ii) 360

(b) Simplify the 2 x -

MATHS JSS2

1. If a prime number is a factor of 42 and 45, what is the prime number? A. 3 B. 6 C. 7 D. 9 0.3
2. In a class of 50 pupils, 28 of them are girls, what percentage of the class are boys? A. 56% B. 50% C. 44% D. 22%
3. Solve 9² - 3² A.144 B. 112 C. 72 D. 136
4. How many weeks are in 70 days A. 12 weeks B. 11 weeks C. 10 weeks D. 6 weeks
5. There are 60 balloons in one group. How many balloons are there in 3 groups? A. 90 B. 100 C. 180 D. 200
6. All these are prime numbers EXCEPT …. 2,3,5,7,9,11,13,17 and 19 A. 7 B. 9 C. 11 D. 13
7. How many vertices has a cube A. 12 B. 10 C. 8 D. 6
8. Express 0.00254 in standard form A. 2.54 X 10 ̄² B. 2.54 X 10 ̄³ C. 2.54 X 10 ̄⁵ D. 2.54 X 10 ̄ ⁴
9. Write in figure: six hundred and fifty eight million, one hundred and twenty five thousand and one. A. 658,125,100 B. 658,125,101 C. 658,125,001 D. 658,125,000
10. Divide 2408 by 4 A. 64 B. 801 C. 62 D. 602
11. Find the value of 0.8 x (0.17 – 0.09)

A. 0 .64 B. 6.4 C. 0.064 D. 0.0064

1. 480 Hundredth in decimal fraction is

A. 48.0 B. 0.48 C. 4800 D. 4.80

13. Change 92% to a fraction

A. 23/25 B. 0.92 C. 24/25 D. 22/25

14. Change 5/8 to a decimal fraction

A. 0.58 B. 0.265 C. 0.658 D. 0.625

15. Express 37 as a percentage of 50

A. 74% B. 72% C.82% D. 79%

16. Expressed as a product of its prime factors A

1. 32 x5 B. 23 x3 C. 23x32 D. 24x32
2. What is the square of 15?

A. 225 B. 125 C. 625 D. 30

1. The HCF of 28 and 42 is

A. 2 B. 7 C. 14 D. 28

19. The LCM of 10 and 15 is

A. 30 B. 150 C.5 D.10

20. Change 0.55 to a fraction in its lowest term

A. 55/100 B. 11/25 C. 11/26 D. 100/55

21. The value of √ 5 4/9 is

a. 5 2/3 b. 2 2/3 c. 2 1/3 d. 3 ½

22. Change 92% to a fraction

a. 23/25 b. 0.92 c. 24/25 d. 22/25

23. Change 5/8 to a decimal fraction

a. o.58 b. 0.265 c. 0.658 d. 0.625

24. If (-3)÷(-24)=y, then y =

a. -1/8 b. +1/8 c. +8 d. +72

25. Express 37 as a percentage of 50

a. 74% b. 72% c.82% d. 79%

26. Express 13k as a percentage of 50

a.11% b. 13% c. 15% d. 19%

27. Simplify (-y) x (-9)

a. 9y2 b. 9y c. 9y+y d. -9y

28. Simplify 7a x (-6)

a. 42a b. -42a2 c. +42 d. -42a

29. What is the value of 82% of N150?

a. N123 B. N110 C. N130 D. N12

30. Express 3:6 as simply as possible

a. 1:2 b. 1:3 c. 3:4 d. 5:7

31.Express $200 to $150 as simply as possible

a.3:4 b. 4:3 c. 1:5 d. 2 :8

32.3/8=9/x. Find the value of x

a. 22 b. 36 c.24 d. 36

33. Remove the bracket in the following (a+y) + (a-y)

a. 3a2 b. 2a2 c. a2-y2 d.29

34.Complete the bracket:

9ax – 3xz = 3x ( )

1. 3x(3a-z) b. 3(3ax-3xz) c. 3x(a-3xz) d. 3x(3a+axz)

35.What is the value of 43?

a. 81 b. 84 c. 64. d. 12

36. Give five multiples of 5

a.20, 50,70,80,90

b.10, 15, 20, 25, 30

c. 12, 15, 20, 22, 26

d. 16, 24, 32, 36, 40

37. What is 4% in fraction?

a. 2/25 b. 3/10 c.1/25 d. 3/25

38. 6 notebooks cost 90k. What is the coast of 5 notebooks?

a.100k b. N70.00 c. 95k d. 75k

39. Convert 1/20 to decimal fraction

a.0.03 b.0.05 c. 0.45 0.15

40. Factorise: a-ay =a ( )

a. (1-ay) b. a (1-ay) c. a (1-y) d. a (y-1)

41. Simplify 3+ 1/2d

a. 6d+1/2d b. 8+d/2d c. 5d/2d+1 d. 4+2d/2d

42. Which of the following are Pythagorean triples?

I(3,4,5) ii(5,12,13)iii(8,13,17)

1. I only b. i and ii only c. ii only d. ii and iii only

43. If m x (-2) =12, then m=

a. +24 b. +14 c. +6 d. -6

44. A car travels 84km in 2 hours. How far does it go in 3 hours?

a.126km b. 41km c. 90km d. 12km

45. What is the value of 4 in 6402?

a. four thousand b. four tens c. four units d. four hundred

46. Solve: x/4 =1/2

a. x =3 b. x=1 ¾ c. x=2 d. x=4

47. Find the ratio of 10cm to 40cm

a. 50:20 b. 4:1 c. 1:4 d.3:5

48. Simplify 3a-2/4 +2a

a. 11a+2/4 b. 11a-2/2 c. 11-2a/4 d. 11-2a2/4

49. Simplify 5a/8 -3a/8

a. 3a/8 b. 8a/3 c. a/4 d –a/4

50. Write 0.0007896 in standard form

A. 7896 x 10-4 B. 78.96 x 10-7 C. 7.896 x 10-4 D. 7.896 x 10-⁵

THEORY

1. Express 0.0000000318 in standard form (b) Express 6.86 x 10⁵ (c) Evaluate and write your answer in standard form 9000000 ÷ 0.3
2. Find the L.C.M of 30,40, 150 (b) Find the H.C.F of 48,52,88
3. Determine the square root of the following number (i) (ii) (b) Find the square of the following (i) (1.8)² (ii) (4.48)²
4. Complete the table below by expressing as percentage or fraction

|  |  |  |
| --- | --- | --- |
|  | Fraction | Percentage |
| I | 4/5 |  |
| Ii | 28/45 |  |
| Iii |  | 15% |
| iv |  | 140% |

1. Mr Brown’s family budget is shown on the table below for the month of December.

|  |  |  |
| --- | --- | --- |
| Income | Expenses | Amount |
|  | Rent | $7 000 |
|  | Transport | $6 000 |
| $120 000 | Feeding | $28 000 |
|  | Cloth | $6 000 |
|  | Health | $5 000 |
|  | Electricity | $1 500 |
|  | School fees | $22 000 |
|  | Entertainment |  |
|  | Savings | $20 000 |

What is the amount for entertainment?

What is the ratio of saving to total income?

What is the amount for electricity

What is the percentage of savings total income?

(b) The cash price of a refrigerator is $75 000. If a deposit of $20 000 is paid and the instalment payment and the instalment payment of $6 300 is paid 12 months,(i) Calculate the total instalment payment for 12 month (ii) Calculate the difference between the installmental payment and the cash payment

MATHS JSS3 PAPER ONE

1. How many vertices has a cube A. 12 B. 10 C. 8 D. 6
2. Multiply 111₂ by 11₂ A. 11001₂ B. 10110₂ C. 10101₂ D. 10011₂
3. Write in figure: six hundred and fifty eight million, one hundred and twenty five thousand and one. A. 658,125,100 B. 658,125,101 C. 658,125,001 D. 658,125,000
4. Find the sum of the prime factors of 60 A. 5 B. 7 C. 8 D. 10
5. Express 0.00254 in standard form A. 2.54 X 10 ̄² B. 2.54 X 10 ̄³ C. 2.54 X 10 ̄⁵ D. 2.54 X 10 ̄ ⁴
6. Find the HCF of 108 and 72 A. 9 B. 18 C. 27 D.36
7. If p/15 = p/4/5, find the value of p A. 4 B. 8 C. 12 D. 16
8. A regular polygon with 7 sides is called A. Heptagon B. Hexagon C. Nonagon D. Pentagon
9. Simplify 3x(4a – 5b) – 5x(3a – 2b) A. 3ax – 5b B. (3a – 5b)x C. (5b – 3a)x D. –(3a + 5a)x
10. If a prime number is a factor of 42 and 45, what is the prime number? A. 3 B. 6 C. 7 D. 9
11. The value of the 3 in 24.635 is

A. 3 thousandths B. 3 Hundredths C. 3 tenths D. 3 units

1. The HCF of 24 and 60 is

A. 2 B. 3 C. 4 D. 12

1. A distance of 3km and 29m, expressed in metre is

A. 3.029 B. 3.29 C. 3290 D. 3029

2, 4, 5 and 3

3, 5, 6 10

1. The lowest common denominator of

A. 15 B. 30 C. 50 D. 60

1. .Four pages of a 16 page newspaper are missing. The percentage missing is

A. ¼ B. 4 C. 10 D. 25

1. The Roman numeral CXCIV represents the number

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1. 5300ml expressed in litres is

A. 0.053 B. 0.53 C. 5.3 D. 530

1. The number of minutes in 1½ hours is

A. 30 B. 45 C. 65 D. 90

1. Which one of the following is not equivalent to ½?

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1. If 51/7 is expressed as an improper fraction its numerator will be

A. 8 B. 12 C. 13 D. 36

1. To express the fraction 30/48 in its lowest terms, divide the numerator and denominator by

A. 2 B. 3 C. 5 D. 6

1. 45 minutes, expressed as a fraction of one hour is

A.1/60 B. 5 ¼ C. ¾ D. 4/5

1. 13/25, expressed as a percentage, is

A.14% B. 62 ¼ % C.48% D. 52%

25. 67.0s3 to the nearest tenth is

A. 70 B. 67 C. 67.0 D. 67.1

26. 41285 = 41300 to the nearest

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27. Select the correct answer to the following 1200 ÷ 0.04 =

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28. Which of the following numbers is the greatest?

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29 .What is the value of 9 x 2 -2 ÷ 2 + 2?

A. - 49 B. -18 C. 5 D. 14

30. Which of the following is 20% of I hour?

A. 5min B. 6min C. 12min D. 20min

31.Express $200 to $150 as simply as possible

a.3:4 b. 4:3 c. 1:5 d. 2 :8

32.3/8=9/x. Find the value of x

a. 22 b. 36 c.24 d. 36

33. Remove the bracket in the following (a+y) + (a-y)

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36. Give five multiples of 5

a.20, 50,70,80,90

b.10, 15, 20, 25, 30

c. 12, 15, 20, 22, 26

d. 16, 24, 32, 36, 40

37. What is 4% in fraction?

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38. 6 notebooks cost 90k. What is the coast of 5 notebooks?

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39. Convert 1/20 to decimal fraction

a.0.03 b.0.05 c. 0.45 0.15

40. Factorise: a-ay =a ( )

a. (1-ay) b. a (1-ay) c. a (1-y) d. a (y-1)

PAPER TWO

1. Simplify 3+ 1/2d

a. 6d+1/2d b. 8+d/2d c. 5d/2d+1 d. 4+2d/2d

2. Which of the following are Pythagorean triples?

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8. Simplify 3a-2/4 +2a

a. 11a+2/4 b. 11a-2/2 c. 11-2a/4 d. 11-2a2/4

9. Simplify 5a/8 -3a/8

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17. Find the missing number

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D. 2/3, ¾, 5/8, 7/12

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A. 0 B. 1 C. 2 D. -2

23. Find the value of 0.8 x (0.17 – 0.09)

A. 0 .64 B. 6.4 C. 0.064 D. 0.0064

24 ………….is any closed shape which three or more straight sides

1. Polygon (B) Hexagon (C) Triangle (D) Rectangle

25. What is the value of j in j + j+ j = 12

1. 4 (B) -4 (C) 6 (D)-6

26. Which of the number line below shows 7+8



7 8 9 10 11 12 13 14 15

(B)

7 8 9 10 11 12 13 14 15

(C)

7 8 9 10 11 12 13 14 15

(D)

1. 8 9 10 11 12 13 14 15

27. ……is an example of a quadrilateral

1. Pentagon (B) triangle (C) rectangle (D) Rhombus
2. The angle between the hands of a clock at 2’o clock is
3. 150 (B) 300 (C) 450 (D) 600

29. What is the area of a square advertising board of length 5m

1. 10cm (B) 10m2 (C) 25m (D) 25m2
2. Simplify 3m – 8m + 16m -4m
3. 2m (B) 3m (C) 4m (D) 5m

31. Solve for X in X/6 = 5

1. 20 (B) 30 (C) 40 (D) 50
2. ………..is a sector between a diameter and the circumference
3. Semi-circle (B) sector (C) segment (D) equilateral
4. Approximate 67.053 to the nearest tenth
5. 70 (B) 67 (C) 67.1 (D) 67.2
6. …………triangle has three sides of different angle
7. Isosceles (B) right angle (C) scalene (D) equilateral
8. I think of a number 1 multiply it by 5, I add 15 and the result is 100. What is the number 1 thought of
9. 13 (B) 15 (C) 17 (D) 19
10. What is the perimeter of a circle with diameter 14m taking π = 22/7
11. 44cm (B) 55cm (C) 66m (D) 88cm
12. What is the value of X in 2X + 5=1
13. 4 (B) 9 (C) 14 (D) 19
14. What is 0.5 + 0.9
15. 0.14 (B) 1.4 (C) 1.04 (D) 14
16. Find the HCF of 18, 24 and 42
17. 4 (B) 6 (C) 8 (D) 10
18. What is the perimeter of a square with side 7cm
19. 14cm (B) 28cm (C) 49cm (D) -14

THEORY

1. Simplify the following (a) - (b)
2. Convert (23₄ + 31₄) to base eight (b) Factorize 12ax – 6ay
3. Use the method of elimination to solve the equations

3x + 5y = 11

2x + y = 3

1. A company makes different perfumes A,B,C,D and E. sales of the perfume are as shown in the table below

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perfume | A | B | C | D | E |
| Sale in ₦ | 5,600 | 4,800 | 7,500 | 8,100 | 10,000 |

Draw a pie chart to show the sales

1. The difference between -3 and a number is 8. Find two possible values for the number

b. Find the difference between the product of 0.6 and 0.4 and the sum of 0.6 and 0.4