

STUDY GUIDE

Answer all Questions

N/B: The use of calculator and phones are not allowed in the examination hall.

TIME: 45 minutes

YEAR 9

1. Express 0.0001 in standard form (a) 1×10^4 (b) 1×10^3 (c) 1×10^{-3} (d) 1×10^{-4}
2. If Mr. Philip made 32% profit on an article he bought for ₦3, 200.00. Find the amount he sold the article (a) ₦2, 024.00 (b) ₦2, 176.00 (c) ₦3, 200.00 (d) ₦4, 224.00
3. How many faces does a cylinder have? (a) 1 (b) 2 (c) 3 (d) 5
4. Find the LCM of $5ab^2$ and $3a^2b$ (a) $3a/2b$ (b) $15a^2b^2$ (c) $2ab$ (d) $5a^3b$
5. Evaluate $2p - (p - 2p)$ (a) 0 (b) P (c) 3P (d) 2P
6. Find the product $(4m - n)$ and $(3m - 2n)$ (a) $12m^2 + 11mn - 2n^2$ (b) $12m^2 - 11mn + 2n^2$ (c) $12m^2 + 11mn + 2n^2$ (d) $12m^2 - 11mn - 2n^2$
7. Find the product of the square roots of 16 and 9 (a) 15 (b) 12 (c) 20 (d) 25
8. Evaluate $\frac{2a-3b}{5c}$, given that $a = 2$, $b = -2$, $c = 1$ (a) -2 (b) -1 (c) 0 (d) 2
9. Find y if $224 = \frac{4}{25}$ of y (a) 1004 (b) 1400 (c) 1040 (d) 1440
10. The probability of a student passing JSSCE mathematics is 70/100. What is the probability that the student will fail? (a) 10/100 (b) 30/100 (c) 50/100 (d) 70/100
11. Solve the inequality $3x + 18 > 7$ (a) $x > \frac{81}{3}$ (b) $x > \frac{32}{3}$ (c) $x > -\frac{11}{3}$ (d) $x > -\frac{32}{3}$
12. Which of the following fractions is the smallest: $\frac{3}{4}$, $\frac{5}{6}$, $\frac{1}{2}$ and $\frac{12}{15}$ (a) $\frac{12}{15}$ (b) $\frac{5}{6}$ (c) $\frac{3}{4}$ (d) $\frac{1}{2}$
13. Express 6561 in index form (a) 9^3 (b) 9^4 (c) 9^5 (d) 9^6
14. Find the highest common factor of 325, 350 and 375 (a) 13 (b) 15 (c) 21 (d) 25
15. When a number is doubled and 2 is added to it, the result is 20. Find the number (a) 6 (b) 8 (c) 7 (d) 9

16. In a certain school, 260 out of 400 students are girls. What percentage of the students are boys? (a) 42.5% (b) 35% (c) 38.5% (d) 21.5%
17. If there are 300 boys in a school of 720 students, what is the ratio of girls to boys in the school? (a) 7:5 (b) 2:3 (c) 5:7 (d) 3:2
18. Simplify $(45) - (+14)$ (a) 9 (b) 19 (c) -9 (d) 31
19. Simplify $\frac{1}{u} + \frac{1}{v}$ (a) $\frac{v+u}{uv}$ (b) $\frac{1}{uv}$ (c) $\frac{uv-v}{uv}$ (d) $\frac{v-u}{u}$
20. If $3x - 8 = 10$. Find x (a) 6 (b) 4 (c) 8 (d) 10
21. Stella has 52 oranges more than Roseline. If Roseline has 58 oranges, how many oranges have Stella? (a) 6 (b) 100 (c) 110 (d) 120
22. $\frac{3}{5}$ has the same value as all except (a) 12% (b) 0.6 (c) $\frac{39}{65}$ (d) 60%
23. Solve for x in the expression $\frac{x-5}{2} = \frac{x-4}{3}$ (a) 7 (b) -7 (c) -8 (d) 6
24. A block of cheese weight 2.45kg. If it is cut into five pieces, how much (in grams) does each piece weigh? (a) 940g (b) 480g (c) 490g (d) 400g
25. Any number which is a factor of two or more given numbers is called the ____ of the numbers (a) Common Factor (b) Prime Factor (c) Multiple (d) Prime Number