NEW AL WUROOD INTERNATIONAL SCHOOL, JEDDAH, K.S.A

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WORKSHEET -2

GRADE: 7

SUBJECT: MATHEMATICS

Choose the correct answer from the given options:

1) The exponential form of 3125 is

(a) 5^2 (b) 5^3 (c) 5^4 (d) 5^5

2) The coefficient of x in $-8xy^2$ is _____

  (a) -8   (b) $8y^2$ (c) $-8y^2$ (d) none

3) The standard form of 3, 07,000 km is

  (a) 3.7×10^4 (b) 37.0×10^5 (c) 3.007×10^5 (d) 3.07×10^5

4) The value of $3° \times 4° \times 5°$ is ………..

  (a) 60   (b) 0   (c) 1   (d) 3

5) How many terms are there in the expression 12ab –24b +36a

  (a) 1   (b) 2   (c) 3   (d) 4

6) The like term to $-6a^3bc$ is:
  (a) $4a^2b^2c$ b) 5abc   c) $2a^3bc$ d) a^2bc^2

7) The value of $(-1)^2$ is

   (a) 0   (b) -1   (c) 1   (d) None of these

8) $(3^4)^5$ when expressed as a single exponent is

   (a) 3^9 (b) 3^1 (c) 3^{20} (d) 3^5

9) $\frac{3}{8}$ x $\frac{3}{8}$ x $\frac{3}{8}$ x $\frac{3}{8}$ in power notation is _____.

10) Write the next three terms of the pattern 1, 4, 9, _____.

Solve the following:

11) Express 729 x 125 as a product of prime factors in the exponential form.

12) Find the value of $(8^0 - 2^0) + (8^0 + 2^0)$

13) Simplify: (i) $\left(\frac{3^5}{3^2}\right)$ x 3^{10}

               (ii) $8^2 \div 2^3$

14) Evaluate: $\dfrac{5^4 \ \times \ 7^5 \ \times \ 2^9}{8 \times 49 \times 5^2}$

15) If $a = 2$, $b = -2$, find the value of $(2ab + 2ab^2 + ab)$

16) $(25)^2 \times 125 = 5^{4n-1}$

17) Subtract $(2x^2 - 5x + 7)$ from $(3x^2 + 4x - 6)$

18) What should be added to $7x^3 - 3x^2 + 6x + 4$ to get $x^3 - 5x^2 - x + 1$

19) What is the sum of $(4x^3y + y^3z - 8z^3x + 12)$, $(4x^3y + 5y^3z - 3z^3x + 14)$, and $(7x^3y + 4y^3z - 2z^3x + 16)$.

20) Draw a factor tree for the expression $2x + 5 - 4x^2$. Label the terms and factors.

21) Write 2 like terms and 2 unlike terms for the expression: $6x^2y^2$

22) Sia has a certain number of apples. Ria has five less than thrice the number of apples Sia has. Form an algebraic expression for the total number of apples, they have together.

23) Write algebraic expressions for the following statements:
   (a) 10 added to the sum of two numbers.
   (b) Square of a number decreased by 6.

24) Simplify: $\frac{3^5}{3^2} \times 3^{10}$

25) What is the sum of $(3x^2 - 7x - 8)$, $(x^2 + 8x - 3)$ and $(-5x^2 - 3x + 2)$?

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