

Grace Higher secondary School Kohima

Assignment

Class 8

Maths

60 marks

Q1. Using prime factorization method, find which of the following number are true. 2x2=4

i. 1176 ii. 1089

Q2. Show that each of the following numbers is a perfect square. In each case, find the number whose square in the given numbers: 2x2=4

i. 2601 ii. 5929

Q3. By what least number should be the given number be multiplied to get a perfect square number whose square is a new number:- 3x2=6

i. 3675 ii. 7623

Q4. . By what least number should be the given number be divided to get a perfect square number whose square is a new number? In each case, find the number whose square is the new number: 3x2=6

Q5. Without adding, find the sum: 2x2=4m

- i. $(1+3+5+7+9+11+13+15+17+19)$
 ii. $(1+3+5+7+9+11+13+15+17+19+21+23)$

Q6. Express 100 as the sum of 10 odd numbers. 2m

Q7. Evaluate: i. $(105)^2 - (104)^2$ ii. $(92)^2 - (91)^2$ 3m

Q8. Using the formula $(a + b)^2 = (a^2 + 2ab + b^2)$ evaluate : i. $(508)^2$ ii. $(350)^2$ 3m

Q9. Using the formula $(a - b)^2 = (a^2 - 2ab + b^2)$ evaluate : i. $(689)^2$ ii. $(891)^2$ 3m

Q10. Evaluate:: i. 88×92 ii. 94×106 3m

Q11. Find the square root of each of the following numbers by using the method of prime factorisation. 2x2=4

i. 9216 iii. 17876

Q12. Find the smallest number by which 2925 must be divided to obtain a perfect square.. Also find the square root of the perfect square so obtained. 3

Q13. Find the least square number which is exactly divisible by each of the numbers 8,12,15, and 20. 3m

Q14. Evaluate: 2x2=4m

i. $\sqrt{11449}$ ii. $\sqrt{92416}$

Q15. Find e least number which must be added to 8400 to obtain a perfect square. Find the perfect square and its square root. 3m

Q16. Evaluate $\sqrt{2.8}$ correct up to two places of decimal. 2m

Q17. Evaluate; 3m

i. $\sqrt{4\frac{73}{324}}$ ii. $\sqrt{98} \times \sqrt{162}$