



INDIAN SCHOOL AL WADI AL KABIR

Class VI

Mathematics (2026-27)

Worksheet DTQ –PRIME TIME

DESCRIPTIVE TYPE QUESTIONS

Q1.	Find any three numbers that are multiple of 15 but not multiples of 30.
Q2.	Draw a factor tree diagram for the number 168 using the its factors.
Q3.	Check whether the pair of numbers 81 and 18 is co-prime or not. Show your working.
Q4.	Calculate the sum of first seven consecutive prime numbers.
Q5.	Write 3 pairs of twin prime numbers greater than 20.
Q6.	The product of smallest composite number and the smallest two-digit prime number is: (CBQ)
Q7.	Find four pairs of prime numbers whose sum is a multiple of 6(CBQ).
Q8.	List all multiples of 3 and 5 up to 35. Place the multiples in the adjoining venn diagram.
Q9.	Find the largest and smallest 4-digit numbers that are divisible by 11 and are also palindromes. (CBQ)
Q10.	Find the prime factors of the smallest five-digit number by division method.
Q11.	Write the first 5 multiples of: a) 30 b) 12
Q12.	Check whether 28 is a perfect number or not (Show proper steps).
Q13.	Find the common factors of 15, 35 and 50
Q14.	State whether the following statements are true or false. If it is false, give reason. a) All prime numbers are odd. b) All the natural numbers have minimum two factors. c) The smallest even prime number is 2.

Q15.	CASE STUDY: During a Math Activity Day, students were given number cards from 1 to 50. They were asked to classify the numbers as prime or composite and find relationships between different numbers. Answer the following questions: a) Riya selected the number 41. Is it a prime or composite number? Give a reason. b) Aman selected the number 36. Write all the factors of 36 and state whether it is prime or composite. c) The teacher asked students to find the common multiples of 6 and 8. Write the first three common multiples. d) Two number cards were 29 and 31. Are they twin primes? Give a reason.	
Q16.	CASE STUDY: Divisibility Rules For the School Charity Fair, students collected 2,760 tickets, 1,845 coupons, and 3,216 tokens. The items need to be arranged equally into different groups. The teacher asks the students to use divisibility rules to find out how the items can be grouped. Answer the following questions: a) Check whether 2,760 tickets can be divided equally into groups of 2 and 5. b) Check whether 1,845 coupons is divisible by 3 and 5. Give reasons. c) Is 3,216 tokens divisible by 4 and 8? Show your working. d) Which of the three numbers 2,760, 1,845, and 3,216, are divisible by 6? Explain.	

ANSWERS

Q1.	15, 45, 75	Q2.		Q3.	No	Q4.	58
Q5.	(29, 31), (41, 43), (59, 61)	Q6.	44	Q7.	(3, 3), (5, 7), (7, 11), (11, 13)	Q8.	
Q9.	1001, 9999	Q10.	$2 \times 2 \times 2 \times 2 \times 5$ $\times 5 \times 5 \times 5$	Q11.		Q12.	Yes
Q13.	1 and 5	Q14.	a) False b) False c) True	Q15.	a) Yes b) 1, 2, 3, 4, 6, 9, 12, 18, 36; Composite. c) 24, 48, 72 d) Yes	Q16.a) Yes b) Yes c) Yes d) 2760, 3216	