Pakistan Urdu School - Kingdom of Bahrain

Chapter 1 – Sets

Worksheet

Name : _____ **Date : _____**

Subject : Mathematics **Class/Section : _____**

Solve the following:

Q: 1 Fill in the blank:-

I. A set with a finite number of elements is called _____.
II. A U B = B U A is called _____ law.
III. If A= {1,2,3,4} and B={5,6,7} then AUB = _____.
IV. A _____ is the set of all elements not present in A, but present in the universal set.
V. The _____ of two or more sets is a set containing all the elements common to the given sets.

Q: 2 Choose the best answer:-

I. A _____ is a collection of well distinct object.
a. Set b. Union c. Intersection d. power set

II. Two sets are _____ if they contain identical elements.
a. Empty set b. Singleton set c. Finite set d. Equal set

III. A pair of sets with no element in common.
a. Overlapping b. Subset c. Disjoint d. none of these

IV. If A=N and B=Z then A – B is _____
a. Z b. N c. U d. Ø

V. If elements of set A are 5 how many elements of power set?
a. 16 b. 32 c. 64 d. 128

Q: 3 Solve the questions:-

I. Find the power set of each of the following sets.
a. {1,3} b. {Ø, {Ø}}

II. Let P= (1,2,3,4} and Q={0,3,5} Find
a. P U Q b. P ∩ Q c. P – Q d. Q – P

III. Let A,B and C be sets. Show that A U (B U C) = (A U B) U C

IV. If A = {a,b,c,d} and B = {a,c} find a set C such that A ∩ C = B. Is C Unique.

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Chapter 5 – Polynomials

Worksheet

Name : _____ **Date : _____**

Subject : Mathematics **Class/Section : _____**

Solve the following:

Q: 1 Fill in the blank:-

I. A symbol having a fixed value is called a _____.
II. A _____ is an algebraic expression with only two terms.
III. A quadratic polynomial has degree _____.
IV. X^0 = _____.
V. 2ab + b – c + 1 is _____ expression.

Q: 2 Choose the best answer:-

I. Dividend = _____ x quotient + remainder.
a. divisor b. dividend c. divide d. none of these

II. 2abc = _____.

a. monomial b. binomial c. trinomial d. polynomial

III. A _____ polynomial has degree 3.

a. cube b. cubic c. triple d. none of these

IV. A combination of a constant and a variable is a _____

a. constant b. variable c. Expression d. $Algebra$

V. $3b^2a + 2a^2$ has _____ degree?

a. 1 b. 2 c. 3 d. 4

Q: 3 Solve the questions:-

I. Add: 2ax – 6by + 4cz; 4by – 14ax; 9cz – 4ax – 6by

II. How much more than $2a^2 + 4ab + 2b^2$ is $5a^2 + 10ab – b^2$?

III. The base and altitude of a triangle are (3x – 4y) and (6x + 5y) respectively. Find its area.

IV. The area of a rectangle is $x^3 – 8x^2 + 7$. One of its sides is x – 1. Find the size of the other.

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Chapter 6 – Algebra

Worksheet

Name : _____ **Date : _____**

Subject : Mathematics **Class/Section : _____**

Solve the following:

Q: 1 Fill in the blank:-

I. $(a + b)^2$= _____.

II. $(3a + b)(3a – b)$ = _____.

III. $(5 – 2m)^3$ = _____.

IV. The process by which we write an algebraic expression as a product of two or more factors is called _____.

V. $a^2 – b^2$ = _____.

Q: 2 Solve the questions:-

I. Evaluate each of the following using algebraic formulae.

$89^2 + 140 + 1$

II. If $d^2 + \frac{1}{d^2} = 4$ find the following:-

a. $d^4 + \frac{1}{d^4}$ b. $d^4 - \frac{1}{d^4}$

III. Factorize:-

a. $a^2 – ab – 2b + 2a$ b. $x^2 + 6x + 9$

IV. Six tables and four chairs cost Rs. 580 and five tables and two chairs cost Rs. 350. Find the cost of each table and chair.