

CONCEPT OF VECTOR A. A. Jalilov Sh. T. Kadirova

Navoi State Pedagogical Institute

Abstract

The underlying concepts are: directed gasma, vector continuity, unit vector, Null Vector, collinear vector, addition of vectors, subtraction, multiplication by number.

In physics and other technical sciences, as well as mathematics, the quantities considered in asoson are divided into two.

The first is that we come across physical or mechanical quantities that occur with their own number values, that is, are completely identifiable with a single number. An example of these quantities: mass, temperature, time, surface, volume v.h.k. These quantities are called ccalar quantities.

The latter come across quantities that cannot be fully determined by the number value. The indication of their directions, together with the numerical values of these quantities, breaks down. An example of these quantities will be: strength, speed, acceleration. They are called Vector quantities.

Definition-1. Which end of the ends of a given gasma is determined to be the first and which end is the second, this gasma is called The directed gasma.

Definition-2.A directed gasma is called a vector.

We mark the vector in its form or in its form with one small Latin letter. When we define a vector in terms of points are found to be the points where the beginning and end of the corresponding vector are located. The distance between points A and B is called the length of the vector, which , if it is, is defined in terms of.

Vectors whose directions are the same are called uniformly oriented vectors and $\bar{a} \uparrow \uparrow \bar{b}$ it is given in appearance.

Vectors whose directions are opposite are called opposite vectors and are given in terms of.

If the beginning and end of a vector are one defect, it is called a zero vector. The zero Vector does not have a direction, it is zero if it has an extension. Written in terms of a zero vector

A vector whose length is equal to one is called a unit vector or ort.

Definition-3.Vectors parallel to one straight line are called collinear vectors.

Vectors that have the same continuity, the same orientation, and are collinear are called and defined in terms of equal vectors.

Linear operations on vectors

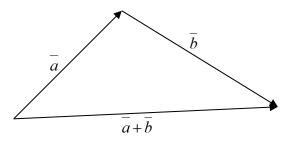




Operations performed on vectors are called linear operations.

Adding vectors subtracting vectors multiplying a vector by a number Vector addition

Definition-4. From two and vectors, the vector head is the vector heading to the end of the vector that is headed when the vector head is attached to the end of the vector, which is called the sum of vectors and is written in terms of. (Figure 1

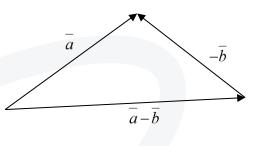


The rule for adding vectors given above is called the Triangle rule.

Subtraction of vectors

As in arithmetic, in this case, the action of subtracting vectors is defined as the inverse action of the addition action.

Definition-5. Given and is a subtraction of vectors, is said to be a satisfying vector of equality. (Figure 2



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