

**Can the sum of the magnitudes of two vectors ever be equal to the magnitude of the sum of the same two vectors? If no, why not? If yes, when? Yes, if the two vectors are perpendicular. No, because of the angle between the two vectors. Yes, if one of the vectors is zero. Yes, if the two vectors are in the same direction. No, it is impossible for the magnitude of the sum to be equal to the sum of the magnitudes.**

Yes, The sum of the magnitude of two vectors can be equal to the magnitude of the sum of the same two vectors. This situation can be apply when the two vector having same angle. the same two vectors when they both will be in same direction.

In this situation, the vector have the same proportion of  $i$  and  $j$  components and therefor their magnitude also add linearly when they are added.

Let, consider the two vectors vector A and vector B

m of magnitude of two vectors =  $A + B$

According to sum of vector formula,

magnitude of sum of two vectors can be given by,

From equation (1) and (2) can be only equal if

- Either vector A or vector B will be equal to 0.
- The angle between both the vector will be 0.

When the angle between both vectors is 0 ,

Where,

$$R = A + B$$

So, The sum of magnitude of two vector will be equal to magnitude of the sum of the same two vectors when they both will be in same direction.

For more information about Vector click the link given below.

[brainly.com/question/13322477](https://brainly.com/question/13322477)

Step-by-step explanation:

$$\text{sum of magnitude of two vectors} = A + B \dots\dots(1)$$

According to sum of vector formula,

magnitude of sum of two vectors can be given by,

equation (1) and (2) can be only equal if

Case 1:

Either or will be equal to 0.

Case 2:

The angle between both the vector will be 0.

When the angle between both vectors,

$$\Rightarrow R = A + B$$

So, the sum of magnitude of two vector will be equal to magnitude of the sum of the same two vectors when they both will be in same direction.

Ken makes a monthly income of \$3000 after taxes. Every month, he spends 40% of his income on clothing. How much money does Ken spend on new clothes every month?

How does the poem "if we must die" by claude mckay talk about race?

The equation to calculate density is  $D = m/v$ . For a liquid substance, which item increases as heat is applied?

If you receive a 1 on the ideas and content rubric, it may mean that a. The writing is exceptionally clear, focused and interesting. c. The writing is characterized by main ideas that stand out. b. The writing lacks a central idea or purpose. d. The writing holds the reader's attention throughout.

A roller coaster car is traveling down a track at 22 m/s. The car has a mass of 2000 kg. What is the Kinetic energy of the car? A) 22,000 J

B) 968,000 J

C) 484,000 J

D) 44,000 J

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No, it is impossible for the magnitude of the sum to be equal to the sum of the magnitudes.

Help! Halfway there. Two square pyramids have the same volume. For the first pyramid, the side length of the base is 16 in and the height is 28. On the 2nd pyramid the height is 112. What is the side length of the base of the 2nd pyramid?,

Cary is 5 5 years older than dan. in 5 years the sum of their ages will be 81. find the age of each man now.

a running trace is 0.25 miles around. if a runner runs 6 laps around the track how many feet has he run

7.849 million in number form

The construction of the glen canyon dam formed which body of water?

Why did the u.s. government move indians onto reservations?

When constructing an inscribed square, how many lines will be drawn in the circle? 2

3

5

7

Kasia plants her watermelons in rows. Her watermelon field has a perimeter of  $71 \frac{1}{3}$  yards and is 44 feet wide. The rows will be planted  $2 \frac{2}{3}$  yards apart. How many rows of watermelons can she plant

Why is the epa considered to be one of the most powerful bureaucracies?

People who buy stock in company are know as

The width of a rectangle is  $\frac{1}{2}$  of its length. What are the sides of the rectangle if its perimeter is 63 in.? Answer:

The width is \_

in, the length is

in\_

How did King David make his sling and of what material

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