

Interpretation 2 , the percent error computed

[Life](#), [Relationships](#)



Interpretation of Results

Graph 1 and 2 are illustration of the use of the polygon method in which you will measure the distance of the starting point which is (0, 0) to the end point which the last arrow will point. And determine the angle using your protractor.

As seen in Graph 1 and 2 , the gray arrow represents the missing vector in which balances the rings which makes it rest at the center of the table. In Table 2 , the percent error computed from it's R has a greater difference in value than the component method which provides as a proof that graphical method may not be as accurate as it seems. Answers to

Questions 1. Why is it important for the ring to be at the center? Since the mass hangers have equal masses, can you disregard them in the experiment? Why? It is important to keep the center to the circle since the computation would be far off and the percent error may be greatly affected since keeping balance means there's no hanger gaining more force than it already has. 2. When a pull is applied on the ring and then released, why does it sometimes fail to return to the center? Since organizing the materials are not perfect, outside it might look fine but pulling and releasing the ring confirms whether it is in its correct positions. 3.

What is the significance of the resultant of to the remaining force .

What generalization can you make regarding their relationships? Finding the resultant of the three means the value must be close to . If the ring is in the circle it means, its respected angles are keeping it balance and have specific distances from each other. If the resultant is close to the value and the process of computation was correct. 4. If the order of adding vectors is changed (i. e. from) will the resultant be different? Why? Vector addition

uses the rule of commutativity which the result will be the same even if the process of addition is different.

5. Which method of determining the resultant is more a) efficient b) accurate c) practical or convenient to use? Defend your answer. I believe the component method is more accurate since it does not require tools that would affect any sort of human error since the graphical method requires the use of tools which may lead to the cause of error in the process of computation.

Conclusion In physics, physical quantities use the quantities of scalar or vector.

Which the difference of the two is that scalar only contains magnitude which is something you are able to measure, and vector quantity is the use of magnitude and direction where proved that the balanced resultant is called the equilibrant. The reason why the ring must be at rest at the center since the sum of the forces put onto the ring makes it 0. I believe that our group was able to attain the right values that were required to perform the task. As such as using the trial and error method which proved to be difficult if the requirements were not met since you'd have to repeat the process until you finally have the correct one. Using the analytical method was far more accurate and simple rather than to use tools to gather data.

Recommendation To be patient when gathering data since your attitude could affect how well you are to put up with how many times you might have to redo the trials.

Learning how to follow the procedure.