**Law of Cosine Lab**

**Problem: Which technique is the most accurate way to solve for the resultant of 2 vector additions, Drawing to scale or using the Laws of Cosine and Sine?**

**Material: ruler, protractor, calculator and force table.**

**Be sure to have 6 (3each) resultants (Draw to scale, Use law of Cosine and build) for the following vector additions:**

**3N @ 100 degrees + 1 N @ 45 degrees.**

**3N @ 150 degrees + 5 N @ 50degrees.**

**Data:**

|  |  |  |
| --- | --- | --- |
|  | **Magnitude** | **Direction** |
| 1. **Law of Cosine and Sine** |  |  |
| 1. **Law of Cosine and Sine** |  |  |
| 1. **Force table** |  | **x** |
| 1. **Force Table** |  | **X** |
| 1. **Draw to scale** |  |  |
| 1. **Draw to scale** |  |  |

**Conclusion: ?’s from the notes**