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Where does the problem start, in as far as vectors are concerned?

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The challenge faced by lectures of first year students at tertiary level is undermined. The perception is the thinking that the subject is a simple and manageable to students. First year students enrolled for pure Bachelor of Science (BSc.) and Bachelor of Engineering (BEng) are mostly expected to undertake some of their Physical Science modules with ease especially since they start with familiar work. The first that the content of their first year Physics involved repetition of the high school work becomes a point of challenge for first year lecturers. This could be the case if assumptions are mostly made about the students understanding those specific topics. An observation was made as an involvement with high school learners, particularly grade 11. The curriculum of grade 11 included and covers vectors and forces extensively. Questions were raised as to where do we or where do our students miss it, especially when they have to undertake these topics at the university level. To try get to the bottom of this challenge, first year level Physics papers which covered forces and vectors was given to grade 11 learners. This work presents the results of both groups (students and grade 11 learners), as we try to go deeper in finding out where the challenge starts.

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