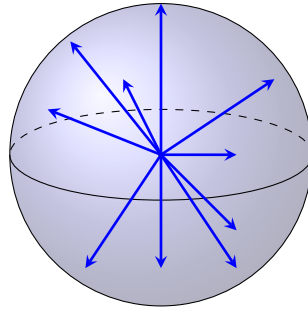

Exercise 1 Determine whether each set, S , of vectors is closed under vector addition, and scalar multiplication.

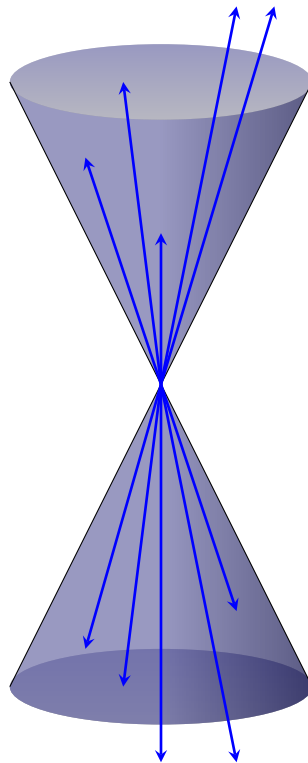
Let S be the set of all vectors contained in a sphere of radius 1 centered at the origin.



Select All Correct Answers:

1. S is closed under scalar multiplication.
2. S is closed under vector addition.
3. None of the above.

Let S be the set of all vectors contained in an infinite double cone.



Select All Correct Answers:

1. *S is closed under scalar multiplication.*
2. *S is closed under vector addition.*
3. *None of the above.*