

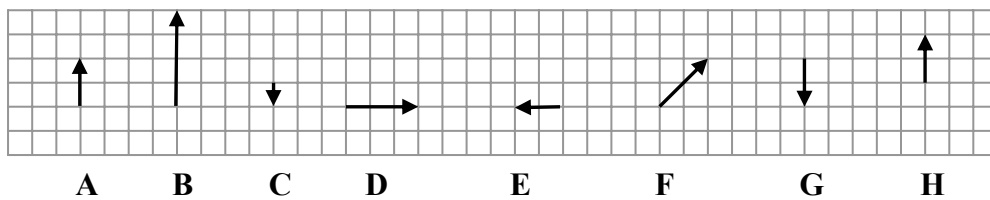
Section V.1: Vectors and Scalars

Exercises

Which of the following quantities are vectors or scalars? Write “V” for vector, “S” for scalar, and “neither” if the quantity isn’t a vector or a scalar.

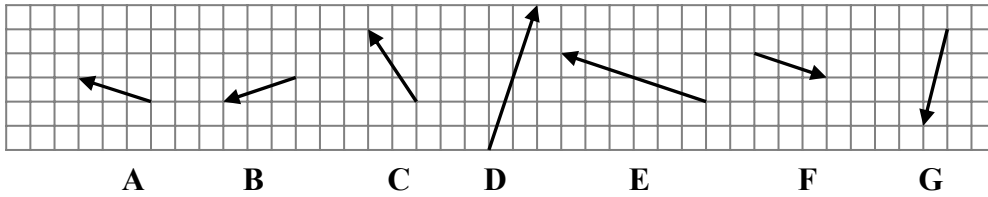
1. 5.6 kg
2. 3.2 m/s northwest
3. left
4. $8.8 \times 10^{-3} \text{ m}^3$
5. 9.81 m/s^2 down
6. 5
7. 43° north of east
8. 9.2 cm

Consider the vectors in the diagram below.



9. List all of the other vectors (if any) that have the same magnitude as vector A.
10. List all of the other vectors (if any) that have the same direction as vector A.
11. List all of the other vectors (if any) that have the same magnitude and direction as A.

Consider the vectors in the diagram below.



12. List all of the other vectors (if any) that have the same magnitude as vector **A**.
13. List all of the other vectors (if any) that have the same direction as vector **A**.
14. List all of the other vectors (if any) that have the same magnitude and direction as **A**.