M. HOW CAN MOTION BE DESCRIBED AND EXPLAINED?

Reference: Heinemann Physics 11, 4th Edition
                    Chapters 8 – 12, Page 257 – 444

Physics with Synno – Motion-2 – Lesson 1

M.1   VECTORS AND SCALARS

Video: Vectors Physics, Basic Introduction, Head to Tail Graphical Method of Vector Addition & Subtraction
https://www.youtube.com/watch?v=1G5E_x0MgLc

M.1.1 Scalars

A scalar is a quantity which has only a size.
eg. distance, temperature, time, mass, volume

M.1.2 Vectors

A vector is a quantity which has both a size and a direction.
eg. displacement,   velocity,   acceleration,   force
    34 m north,   3 m s^{-1} west,   6m s^{-2} south,   12 N north 10° west
To distinguish the scalar F from the vector F we write vectors in one of two ways. **F** and $\vec{F}$
are the vector F.
We represent a vector by an arrow, as such   ⟶
where the size or magnitude of the vector is represented by the length of the arrow and the
direction is the direction in which the arrow points.

Eg.   Describe the direction of the vector shown in the diagram

South 60º East – S 60º E

Or
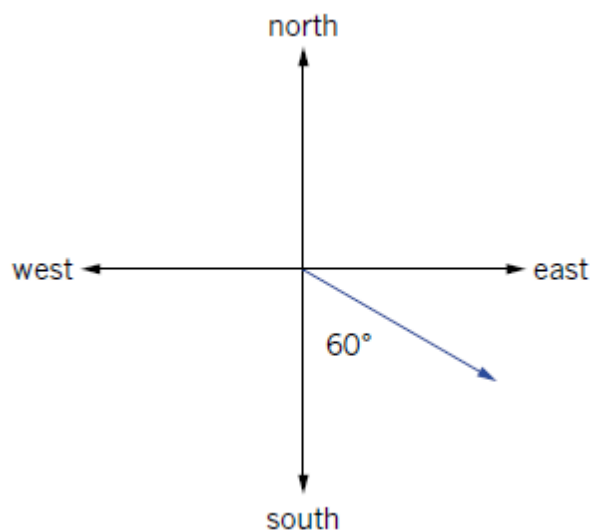
120º T

Problem Set #1:   Text   Page 263 Questions 1, 2, 4 – 10