Captain Michael Gitt Papers - War Department, TM 1-900, Technical Manual, Mathematics for Air Crew Trainees, 2/26/1943

Solution:

[[image - diagram shows how to determine heading in a right drift]]
FIGURE 49

(2) True course=135°, left drift=9°. True heading=144° Answer.

(3) True course=270°, left drift=11°.

(4)True course=315°, right drift=10°. True heading=305° Answer.

(5) True course=0°, left drift=15°.

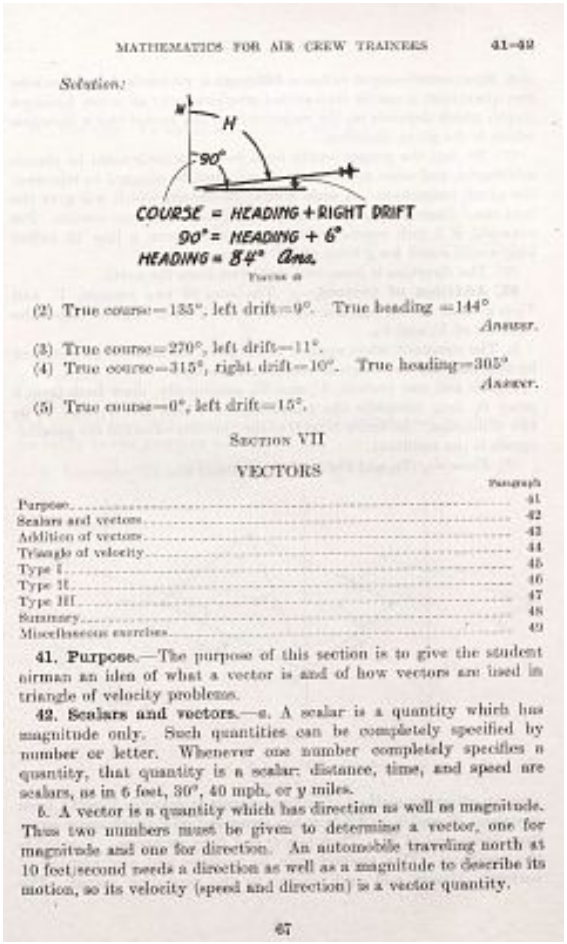
Section VII

VECTORS

41. Purpose.-The purpose of this section is to give the student airman an idea of what a vector is and of how vectors are used in triangle of velocity problems.

42. Scalars and vectors.-a. A scalar is a quantity which has magnitude only. Such quantities can be completely specified by number or letter. Whenever one number completely specifies a quantity, that quantity is a scalar: distance, time, and speed are scalars, as in 6 feet, 30°, 40 mph, or y miles.

b. A vector is a quantity which has direction as well as magnitude. Thus two numbers must be given to determine a vector, one for magnitude and one for direction. An automobile traveling north at 10 feet/second needs a direction as well as a magnitude to describe its motion, so its velocity (speed and direction) is a vector quantity.



MATHEMATICS FOR AIR CREW TRAINEES 41-42

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