VD 4.8.1

A forest fire was spotted from two fire towers (A and B). Assume that tower B is **d** miles due west of tower A. From tower A, the bearing of the fire is **N** α **W.** From tower B, the bearing of the fire is N β E. (as shown in the sketch, not to the scale),

(a)Use a protractor and a ruler to redraw the diagram to the scale. (use the scale of ½ inch = 1 mile)

(b) how far away in miles was the fire to the line AB?

distance between A and B, d	α	β	distance of the fire from line AB
8 miles	78°	34°	1.487
12 miles	39°	55°	5.362
9 miles	42°	67°	2.764
14 miles	58°	76°	2.495
18 miles	51°	63°	5.630
20 miles	35°	32°	15.093
16 miles	56°	48°	6.17