Solution
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First, draw a better diagram. From point B, draw a line S39°E and one S85°W with point A at 50 feet, whatever scale you like. Through point A draw a line S57°E. Construct the parallel lines. (All this could have been easily done with a protractor and scale on the graph paper supplied. I would have given you two of the ten points just for doing this!)

Drop a perpendicular from E to GA. Angle HGE = 38° and angle GEH = 52°, making GH = 100 tan52° =127.994' and GA = 150/cos52°=243.640'.

Extend FD to GB at J. Construct DK perpendicular to AB. Note that K is beyond the line AB. Angle JDK = 34° and angle DJK = 56° so that JK = 100 tan 34°= 67.451'

Drop a perpendicular from B to DJ at L. Angle JBL = 34° and angle KJL = 56°. JB = 50/cos 34° = 60.311' making BK = 67.451' – 60.311' = 7.140'.

ED = GA + AB + BK – GH = 243.640 + 50.00 + 7.140 – 127.994 = 172.786

By Law of Sines in triangles ABC & EDF:

$$\frac{50}{\sin 18^\circ} = \frac{AC}{\sin 124^\circ} = \frac{BC}{\sin 38^\circ}, \text{ and } \frac{172.786}{\sin 18^\circ} = \frac{EF}{\sin 124^\circ} = \frac{DF}{\sin 38^\circ}$$

so that AC = 134.141', BC = 99.616, EF = 463.554' and DF = 344.245'

(Because they are proportional triangles, either ABC or EDF could have been solved by the Law of Sines and the other calculated by proportion, a more likely solution when all of the calculations had to be done with logarithms and/or a slide rule. It is also likely the values would have been given to only two decimal places, too.)