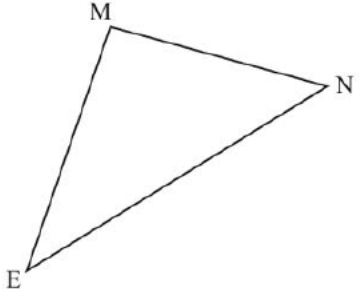
10 Here is some information about the relative positions of the cities of Norwich, N, Manchester, M, and Exeter, E.

- The city of Norwich is 254 km away from the city of Manchester.
- The bearing of Norwich from Manchester is 112°.
- The city of Exeter is 395 km away from the city of Norwich.
- The bearing of Exeter from Norwich is 238.3°.

The approximate relative positions of the three cities are shown in the diagram.



Determine the distance of Manchester from Exeter. **[3]**