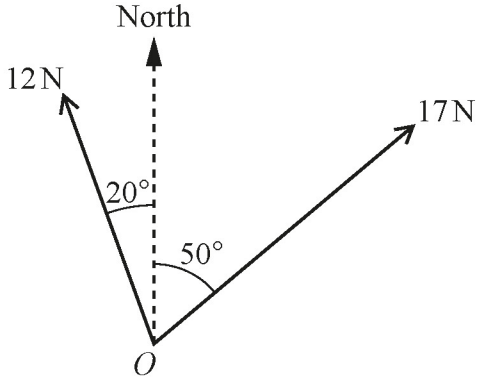
9



Two horizontal forces of magnitudes 17 N and 12 N act at a point O along bearings of 050° and 340° respectively (see diagram).

(a) Determine the magnitude and bearing of the resultant force. **[6]**

A third horizontal force **F** is now applied at O. The three forces are in equilibrium.

(b) State the magnitude of **F** and give the bearing along which it acts. **[2]**