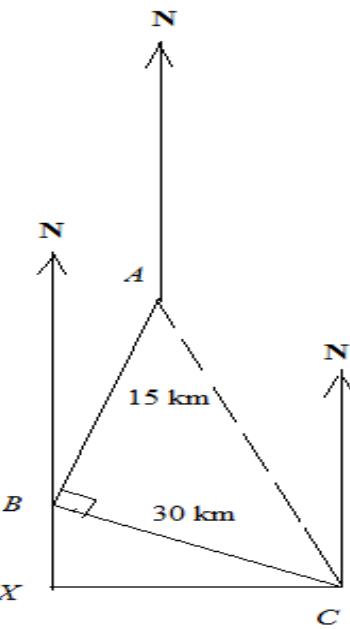


Question	Scheme	Mark	Notes
27 (a)	 <p>$\angle ABC = 90^\circ$</p> $AC = \sqrt{30^2 + 15^2}$ $AC = 33.54 \rightarrow \text{awrt } 33.5 \text{ (km)}$	3	M1 M1 (DEP) A1
(b)	<p>Point X is st BX is perpendicular to CX (see diagram)</p> $\angle BCX = 20^\circ$ $\tan \angle BCA = \frac{15}{30} \quad (\angle BCA = 26.565^\circ)$ <p>Bearing of A from C = $270 + (" \angle BCA " + 20)$</p> <p>(OR)</p> $\tan \angle BAC = \frac{30}{15} \quad (\angle BAC = 63.435^\circ)$ <p>\therefore bearing of C from A is $200 - "63.435" \quad (= 136.565^\circ)$</p> <p>$\therefore$ bearing of A from C is $360 - (180 - "136.565")$ (oe))</p> <p>$316.565 \rightarrow \text{awrt } 317$</p>	4	M1 M1 M1 (DEP) (M1) (M1) (DEP) (M1) (DEP)