

Now, sine is positive in both the first and second quadrants, so either solution is potentially an angle in a triangle (as they are both less than  $180^\circ$ ). However, if we were to take the acute (first quadrant solution), then  $\theta$  would be larger than  $90^\circ$ , which contradicts the fact that  $B$  is on the line-of-sight from  $A$  to  $C$  and between them (as stated in the question) – this would mean  $B$  was on the other side of  $C$  (see the diagram). So we must take the obtuse (second quadrant) solution (which does NOT coincide with  $\sin^{-1}(0.703516\dots)$ ):

$$\angle OBA = \sim 134.71^\circ.$$

We know that the angle sum of a triangle is  $180^\circ$ , so  $\theta = 180 - \angle OAB - \angle OBA = \sim 5.1^\circ$ . The question asked for a bearing, so we may conclude that the point  $B$  is on a bearing of  $5^\circ T$  ( $5^\circ$  true) or  $N5^\circ E$  from Uluru.

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