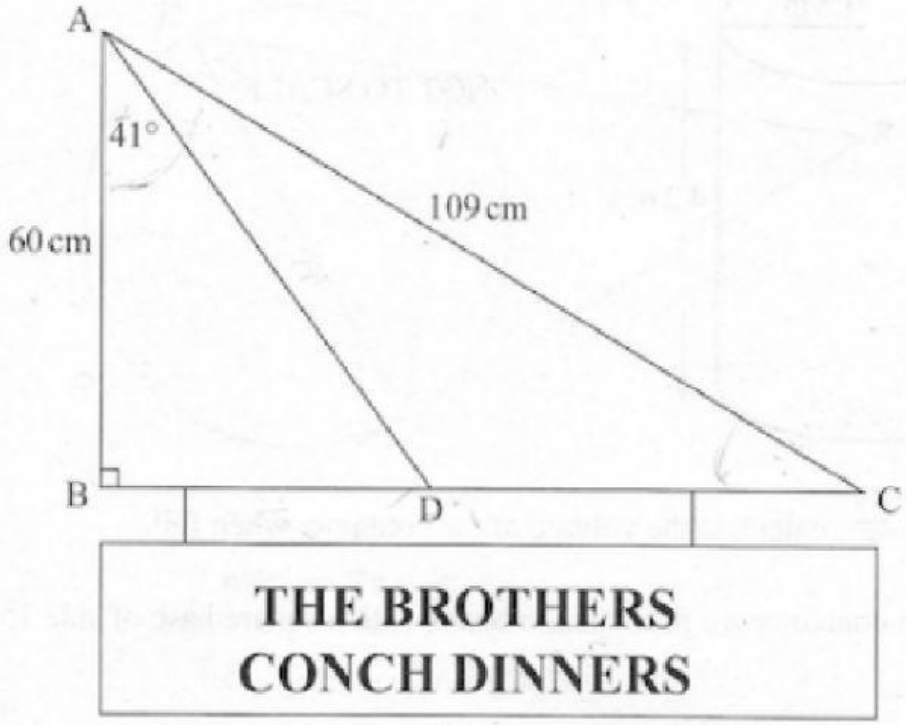
Name: _____ Date: _____

The questions where you see two boxes , in the first box, put in the trig. Ratio that you used. (**sin, cos, tan**) and in the second box put in your answer.

1.

The diagram shows the support bracket for a restaurant sign. $AB = 60\,cm$, $AC = 109\,cm$ and $\angle BAD = 41°$.



Calculate

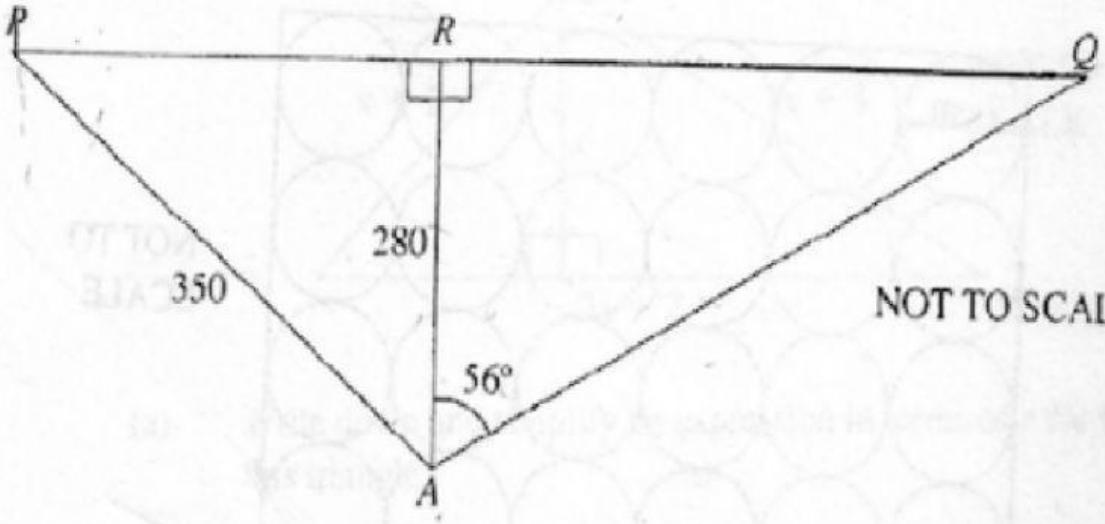
(a) the length of BC, _____ cm [3]

(b) the angle C, _____ o [3]

(c) the length of AD. _____ cm [3]

2.

An airplane A is 350 miles from P en route to Q on a bearing of 056°. Presently the airplane is 280 miles due south of R. R is due east of P and also due west of Q.



Calculate (a) the distance PR, _____ miles

(b) the angle P, _____ o

(c) the bearing of A from P, _____ o

(d) the distance AQ, _____ miles