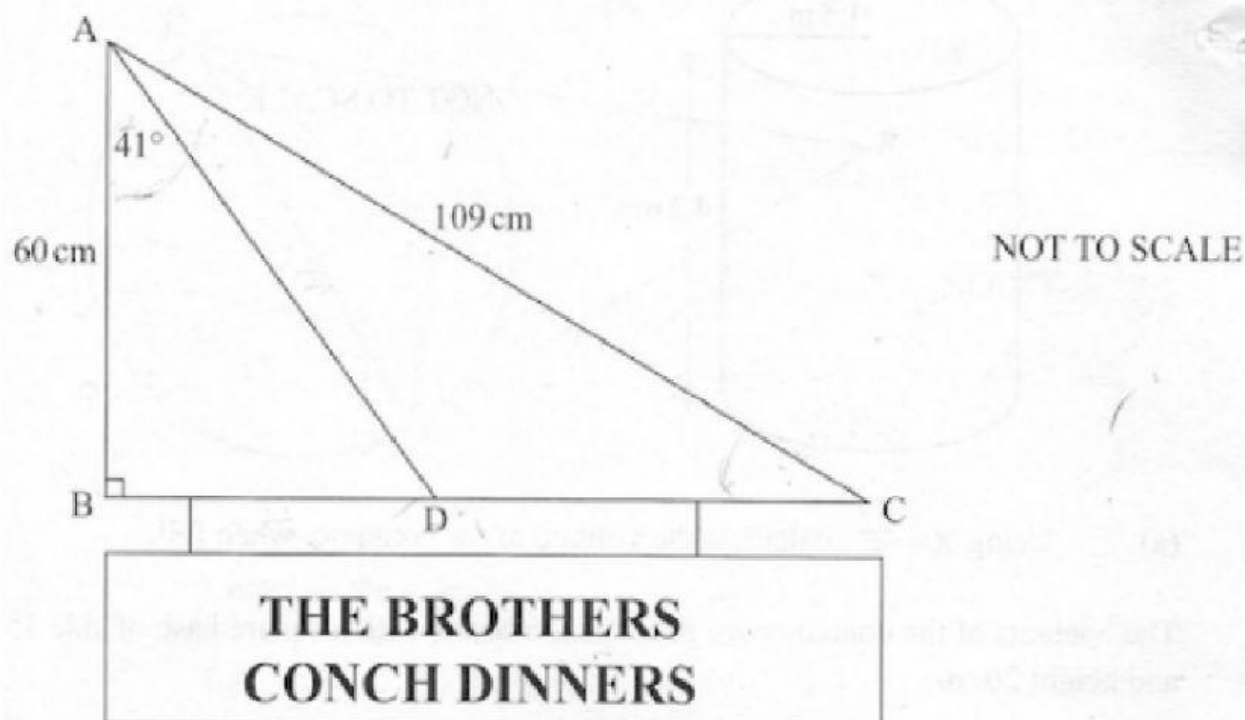


Name: _____ Date: _____

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. $AB = 60\text{ cm}$, $AC = 109\text{ cm}$ and $\angle BAD = 41^\circ$.



Calculate

(a) the length of BC ,

cm

[3]

(b) the angle C ,

o

[3]

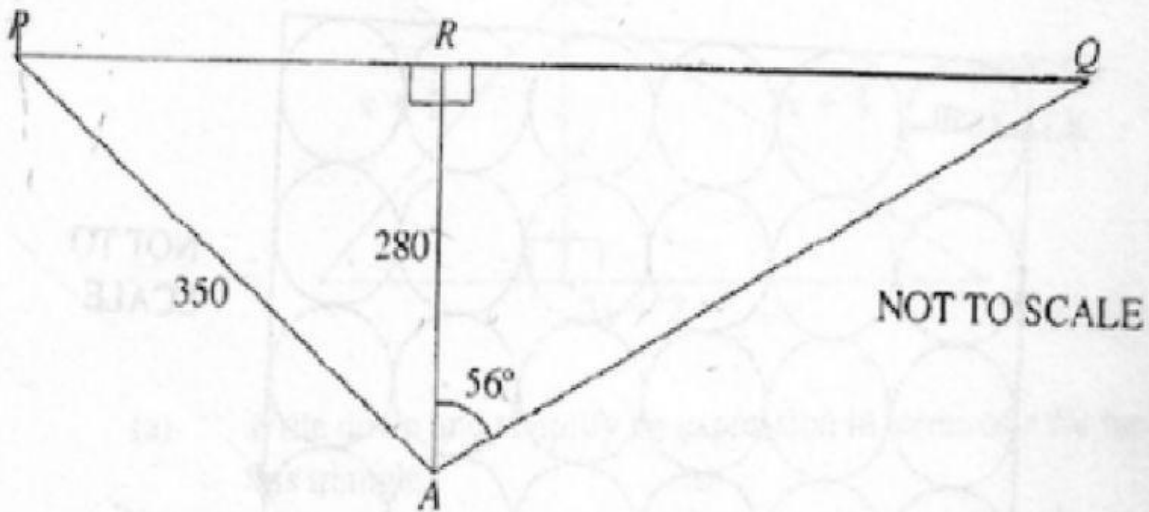
(c) the length of AD ,

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 , $^\circ$
- (c) the bearing of A from P , $^\circ$
- (d) the distance AQ , miles