MBF 3CI

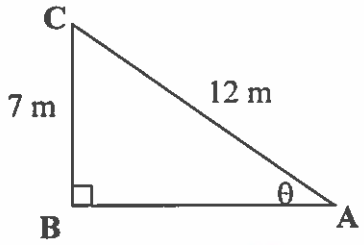
12

NAME:

Exam Review Quiz – Trigonometry

1. Determine the following: (answer to one decimal place)

a) find ∠A (marked as θ)

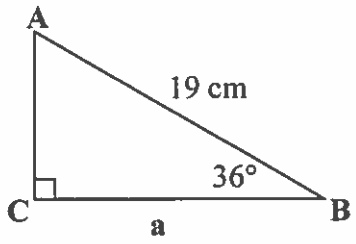


$\sin A = \frac{7}{12}$ ✓

$A = \sin^{-1}\left(\frac{7}{12}\right)$

$A \doteq 35.7°$ ✓

b) find the length of side a

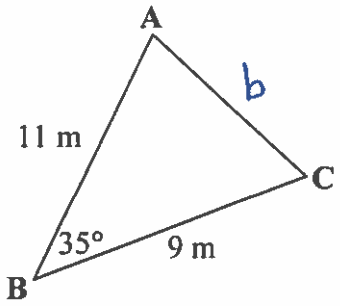


$\cos 36° = \frac{a}{19}$ ✓

$a = 19(\cos 36°)$

$a = 15.4$ cm ✓

2. Solve the following triangle. (Find all missing angles & sides)



$b^2 = 9^2 + 11^2 - 2(9)(11)\cos 35°$ ✓

$b^2 = 39.807895$

$b \doteq 6.3$ ✓

$\frac{\sin A}{9} = \frac{\sin 35°}{6.3}$ ✓

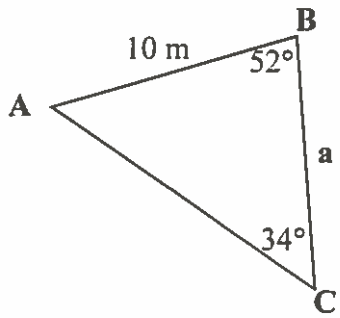
$\sin A = \frac{\sin 35°}{6.3} \times 9$

$\angle A \doteq 55°$ ✓

$\angle C = 180 - 55 - 35$

$\angle C = 90°$ ✓

3. Solve for side a.



$\frac{a}{\sin 94°} = \frac{10}{\sin 34°}$ ✓

$a = \frac{10}{\sin 34°} \times \sin 94°$

$a \doteq 17.8$ m ✓

$\angle A = 180 - 52 - 34$

$\angle A = 94°$ ✓