

7.2 - THE LAW OF SINES

1) $\beta = 30^\circ$, $\gamma = 125^\circ$, $b = 10$. AAS.

$c=16.38$; $m\angle a=25^\circ$; $a=8.45$

2) $\alpha = 45^\circ$, $\beta = 40^\circ$, $c = 4$. $b=2.58$; $a=2.84$; $m\angle c=95^\circ$

3) 17.8 km

4) $m\angle a=90^\circ$, $c=8.66$, $m\angle c=60^\circ$ One

5) $m\angle a=45.58^\circ$, $m\angle c=104.52^\circ$, $c=13.56$ OR $m\angle a=134.42^\circ$, $m\angle c=15.58^\circ$, $c=3.76$

6) None

7) None

8) 2, $m\angle e=72.71^\circ$; $m\angle f=64.29^\circ$; $e=6.61$; $m\angle e=107.29^\circ$; $m\angle f=29.71^\circ$; $f=3.63$

