**Question 1** (Use your calculator or log tables) **Solution at bottom of page**

If$ \cos(B= -0.8660)$. $0°\leq B \leq 360°.$ Find two possible values for B.

**Solution**



Because $\cos(B= -)$ the angle must be in the 2nd or 3rd quadrant.

Using log tables we can see that 0.8660 corresponds to $30°$

Hence because of being in the 2nd or 3rd quadrants and using the third circle diagram above we get the following

$$180-150=30$$

And

$$210-180=30$$

Therefore solutions are $210°$ and $150°$

**Question 2** (Use your calculator)

If$ \sin(B= 0.7660)444431$. $0°\leq B \leq 360°.$ Find two possible values for B.

**Solution**



Because $\sin(B= +)$ the angle must be in the 1st or 2nd quadrant.

Using your calculator $ 0.7660444431$ corresponds to $50°$

Hence because of being in the 1st or 2nd quadrants and using the third circle diagram above we get the following

$$Angle=50$$

And

$$180-130=50$$

Therefore solutions are $50°$ and $130°$

**Question 2** (Use your calculator)

If $\tan(C= -0.4663076582) $ $0°\leq C \leq 360°.$ Find two possible values for C.

**Solution**



Because $\tan(C= -)$ the angle must be in the 2nd or 4th quadrant.

Using your calculator.$ 0.4663076582 $corresponds to $25°$

Hence because of being in the 2nd or 4th quadrants and using the third circle diagram above we get the following

$$180-155=25$$

And

$$360-335=25$$

Therefore solutions are $155°$ and $335°$