

Math 1613 - Trigonometry

Quiz #5 - 2011.09.01

Solutions

1. Explain one of the types of methods of bearing.

Method 1 – If a single angle is given, such as 93° , the bearing is measured clockwise from due north.

Method 2 – The second method starts with a north-south line and uses an acute angle to show directions east to west. An example would be S 52° E.

2. Consider a triangle with angles A , B and C , and opposite sides of length a , b , and c respectively. If $C = 90^\circ$, $a = 13$ and $c = 22$, find expressions which represents the values each of A and B . (You do not need to simplify your answer or use a calculator).

We have $\cos(B) = \frac{13}{22}$, or $B = \cos^{-1}\left(\frac{13}{22}\right)$. Similarly, for A we have the relation $\sin(A) = \frac{13}{22}$, or $A = \sin^{-1}\left(\frac{13}{22}\right)$.