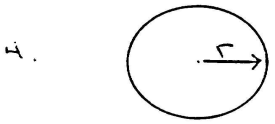
Physics 171 - Handout #1
Mathematics Review

$ax^2 + bx + c = 0$

1. Express x in terms of a, b and c

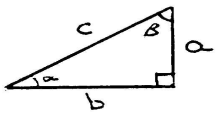
2. $\ln(e^n) =$ _____
$\ln(x \cdot y) =$ _____
$\ln(x/y) =$ _____
$\ln(a^x) =$ _____
$e =$ _____ (3 digits)

3. $\log(10^n) =$
$\log 1000 =$
$\log .01 =$

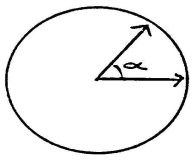
4.


Area of circle =
Circumference of circle =
$360^\circ =$ _____ radians
$\pi =$ _____ (3 digits)

5. Express c in terms of a and b
Express α in terms of β
Area of triangle =

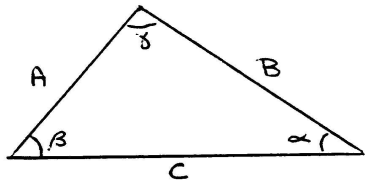
6.


Express in terms of a, b and c
$\sin\alpha =$
$\cos\alpha =$
$\sin\beta =$
$\cos\beta =$
$\tan\alpha =$

7.


Express in terms of trigonometric functions of α
$\sin(-\alpha) =$
$\cos(-\alpha) =$
$\sin(90-\alpha) =$
$\cos(90-\alpha) =$
$\sin(180-\alpha) =$
$\sin(180+\alpha) =$

8. $\sin 0^\circ =$
$\cos 0^\circ =$
$\sin 90^\circ =$
$\cos 90^\circ =$
$\sin 180^\circ =$
$\cos 180^\circ =$
$\sin 270^\circ =$
$\cos 270^\circ =$
$\tan 0^\circ =$
$\tan 45^\circ =$

9. and 10.


9. Express C in terms of A, B and γ
B in terms of A, C and β
A in terms of B, C and α