**MAP 4C TRIGONOMETRY FORMULA SHEET**

**Pythagorean Theorem**

$$c^{2}= a^{2}+ b^{2}$$

**Primary Trig Ratios**

$\sin(θ)= \frac{Opp}{Hyp}$ $\cos(θ)= \frac{Adj}{Hyp}$ $\tan(θ)= \frac{Opp}{Adj}$

**Sine Law**

$\frac{a}{sinA}= \frac{b}{\sin(B)}= \frac{c}{\sin(C)}$ $\frac{\sin(A)}{a}= \frac{\sin(B)}{b}= \frac{\sin(C)}{c}$

**Cosine Law**

$c^{2}= a^{2}+ b^{2}-2abcosC$ $\cos(C )= \frac{c^{2}- a^{2}- b^{2}}{-2ab}$

**Acute / Obtuse Angles**

|  |  |  |
| --- | --- | --- |
|  | Acute | Obtuse |
| sin |  |  |
| cos |  |  |
| tan |  |  |

C

B

b

A

c

a