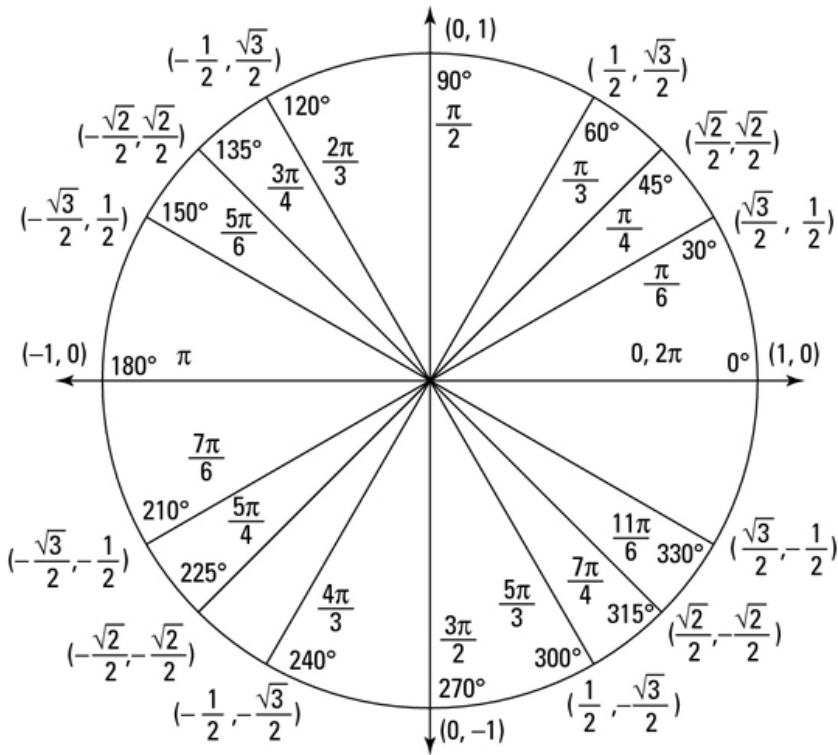


**FST**  
**Final Reference Sheet**

Name \_\_\_\_\_

This reference sheet may be used on the entire final exam. A graphing calculator may be used on the second half.



Law of Sines	Law of Cosines	Area Formula
$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$	$c^2 = a^2 + b^2 - 2ab \cos C$	$A = \frac{1}{2} ab \sin C$

**Trigonometric Identities**

Name	$x$	$\cos x$	$\sin x$	$\tan x$
Opposite	$-\theta$	$\cos \theta$	$-\sin \theta$	$-\tan \theta$
Half-Turn	$180^\circ + \theta$	$-\cos \theta$	$-\sin \theta$	$\tan \theta$
Supplements	$180^\circ - \theta$	$-\cos \theta$	$\sin \theta$	$-\tan \theta$
Complements	$90^\circ - \theta$	$\sin \theta$	$\cos \theta$	
Pythagorean Identity	$\cos^2 \theta + \sin^2 \theta = 1$			

**FST**  
**Final Reference Sheet**

Name \_\_\_\_\_

**Transformations of Sine (or Cosine) Function**

$$\frac{y-k}{b} = \sin\left(\frac{x-h}{a}\right)$$

amplitude:

period:

phase shift:

vertical shift:

**Probability**

Probability of an event:  $P(E) = \frac{N(E)}{N(S)}$

Permutations:  ${}_n P_r =$

Factorials:  $n! =$

**Additional Notes**