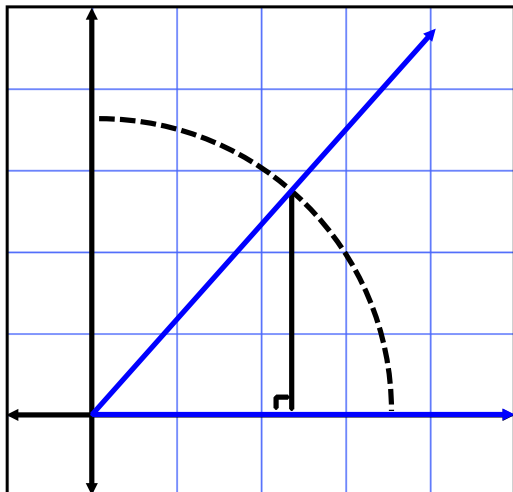


Algebra II

12-2

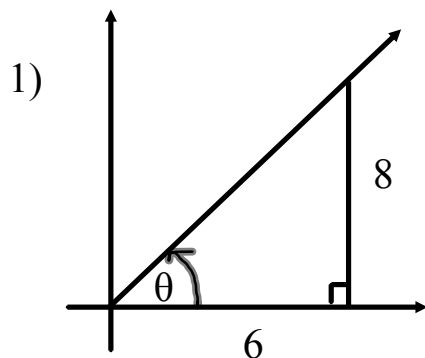
Trigonometric Functions of Acute Angles

Definition of the Six Trigonometric Functions



sine -	cosecant-
cosine-	secant -
tangent-	cotangent-

Find the values of the six trigonometric function of angle θ .(pg 559)



$\sin(\theta) =$		$\csc(\theta) =$	
$\cos(\theta) =$		$\sec(\theta) =$	
$\tan(\theta) =$		$\cot(\theta) =$	

Find the values of the six trigonometric functions of an angle θ in standard position whose terminal side passes through point P .

5) $P(8,15)$

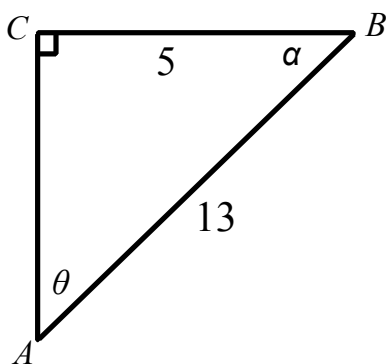
$\sin(\theta) =$		$\csc(\theta) =$	
$\cos(\theta) =$		$\sec(\theta) =$	
$\tan(\theta) =$		$\cot(\theta) =$	

Complete the table. In each case, θ is an acute angle.

11)

$\sin(\theta) =$	
$\cos(\theta) =$	$\frac{\sqrt{3}}{2}$
$\tan(\theta) =$	

Co-function Identities -



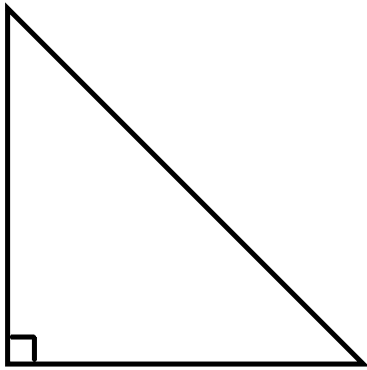
$\sin(\theta) =$	
$\cos(\theta) =$	
$\tan(\theta) =$	

$\sin(\alpha) =$	
$\cos(\alpha) =$	
$\tan(\alpha) =$	

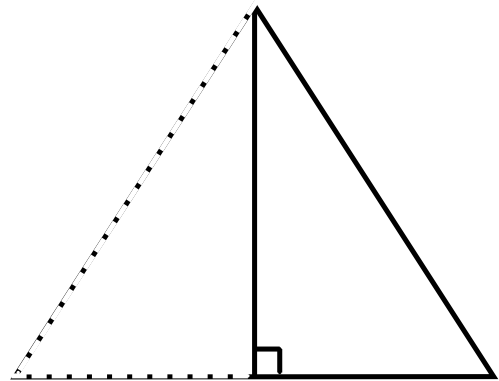
Use co-function identities to find the measure of the acute angle ϕ .

17) $\cos\phi = \sin 40^\circ$

Special Triangle Relationships -



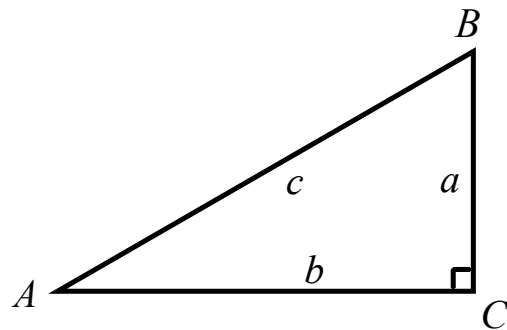
Isosceles
Right Triangle



Half of an Equilateral
Triangle

Use the diagram at the right. Find the lengths of the sides and the measures of the angles that are not given. Leave your answers in simplest radical form.

21) $b = 2$
 $\angle A = 45^\circ$



Assignment:
Pg. 559
2-28 even