

# Advanced Math

pg 387

2) $\sin \theta = \frac{5}{13}$	3) $\sin \theta = \frac{8}{17}$	4) $\sin \theta = \frac{1}{\sqrt{2}}$	5) $\sin \theta = \frac{1}{3}$	6) $\sin \theta = \frac{8}{15}$
$\cos \theta = \frac{12}{13}$	$\cos \theta = \frac{15}{17}$	$\cos \theta = \frac{1}{\sqrt{2}}$	$\cos \theta = \frac{2\sqrt{2}}{3}$	$\cos \theta = \frac{\sqrt{61}}{15}$
$\tan \theta = \frac{5}{12}$	$\tan \theta = \frac{8}{15}$	$\tan \theta = 1$	$\tan \theta = \frac{1}{2\sqrt{2}}$	$\tan \theta = \frac{8}{\sqrt{61}}$
$\csc \theta = \frac{13}{5}$	$\csc \theta = \frac{17}{8}$	$\csc \theta = \sqrt{2}$	$\csc \theta = 3$	$\csc \theta = \frac{15}{8}$
$\sec \theta = \frac{13}{12}$	$\sec \theta = \frac{17}{15}$	$\sec \theta = \sqrt{2}$	$\sec \theta = \frac{3}{2\sqrt{2}}$	$\sec \theta = \frac{15}{\sqrt{61}}$
$\cot \theta = \frac{12}{5}$	$\cot \theta = \frac{15}{8}$	$\cot \theta = 1$	$\cot \theta = 2\sqrt{2}$	$\cot \theta = \frac{\sqrt{61}}{8}$

7) $\sin \theta = \frac{3}{5}$	8) $\sin \theta = \frac{1}{\sqrt{5}}$	10) $\sin \theta = \frac{1}{\sqrt{26}}$	11) $\sin \theta = \frac{\sqrt{3}}{2}$	12) $\sin \theta = \frac{2\sqrt{6}}{7}$
$\cos \theta = \frac{4}{5}$	$\cos \theta = \frac{2}{\sqrt{5}}$	$\cos \theta = \frac{5}{\sqrt{26}}$	$\cos \theta = \frac{1}{2}$	$\cos \theta = \frac{5}{7}$
$\tan \theta = \frac{3}{4}$	$\tan \theta = \frac{1}{2}$	$\tan \theta = \frac{1}{5}$	$\tan \theta = \sqrt{3}$	$\tan \theta = \frac{2\sqrt{6}}{5}$
$\csc \theta = \frac{5}{3}$	$\csc \theta = \sqrt{5}$	$\csc \theta = \sqrt{26}$	$\csc \theta = \frac{2}{\sqrt{3}}$	$\csc \theta = \frac{7}{2\sqrt{6}}$
$\sec \theta = \frac{5}{4}$	$\sec \theta = \frac{\sqrt{5}}{2}$	$\sec \theta = \frac{\sqrt{26}}{5}$	$\sec \theta = 2$	$\sec \theta = \frac{7}{5}$
$\cot \theta = \frac{4}{3}$	$\cot \theta = 2$	$\cot \theta = 5$	$\cot \theta = \frac{1}{\sqrt{3}}$	$\cot \theta = \frac{5}{2\sqrt{6}}$

13) $\sin \theta = \frac{3}{\sqrt{10}}$	14) $\sin \theta = \frac{4}{17}$	15) $\sin \theta = \frac{2}{\sqrt{13}}$	16) $\sin \theta = \frac{3}{8}$	17) a) $\tan 60^\circ = \sqrt{3}$
$\cos \theta = \frac{1}{\sqrt{10}}$	$\cos \theta = \frac{\sqrt{273}}{17}$	$\cos \theta = \frac{3}{\sqrt{13}}$	$\cos \theta = \frac{\sqrt{55}}{8}$	b) $\sin 30^\circ = \frac{1}{2}$
$\tan \theta = 3$	$\tan \theta = \frac{4}{\sqrt{273}}$	$\tan \theta = \frac{2}{3}$	$\tan \theta = \frac{3}{\sqrt{55}}$	c) $\cos 30^\circ = \frac{\sqrt{3}}{2}$
$\csc \theta = \frac{\sqrt{10}}{3}$	$\csc \theta = \frac{17}{4}$	$\csc \theta = \frac{\sqrt{13}}{2}$	$\csc \theta = \frac{8}{3}$	d) $\cot 60^\circ = \frac{1}{\sqrt{3}}$
$\sec \theta = \sqrt{10}$	$\sec \theta = \frac{17}{\sqrt{273}}$	$\sec \theta = \frac{\sqrt{13}}{3}$	$\sec \theta = \frac{8}{\sqrt{55}}$	
$\cot \theta = \frac{1}{3}$	$\cot \theta = \frac{\sqrt{273}}{4}$	$\cot \theta = \frac{3}{2}$	$\cot \theta = \frac{\sqrt{55}}{3}$	

18a) $\csc 30^\circ = 2$	19a) $\sin \theta = \frac{1}{3}$	20a) $\cos \theta = \frac{1}{5}$	22a) $\cot \beta = \frac{1}{5}$
b) $\cot 60^\circ = \frac{1}{\sqrt{3}}$	b) $\cos \theta = \frac{2\sqrt{2}}{3}$	b) $\cot \theta = \frac{1}{2\sqrt{6}}$	b) $\cos \beta = \frac{1}{\sqrt{2}}$
c) $\cos 30^\circ = \frac{\sqrt{3}}{2}$	c) $\tan \theta = \frac{1}{2\sqrt{2}}$	c) $\cot(90^\circ - \theta) = 2\sqrt{6}$	c) $\tan(90^\circ - \beta) = \frac{1}{5}$
d) $\cot 30^\circ = \sqrt{3}$	d) $\sec(90^\circ - \theta) = 3$	d) $\sin \theta = \frac{2\sqrt{6}}{5}$	d) $\csc \beta = \frac{\sqrt{2}}{5}$