UNIT 6 WORKSHEET 15
EVALUATING TRIG FUNCTIONS OF ANY ANGLE

Find the exact value of the six trigonometric functions of an angle θ, in standard position, given the following information.

A) Given $\sin\theta = \dfrac{3}{5}$ the angle θ lies in quadrant II.   **B)** Given $\tan\theta = \sqrt{3}$ the angle θ lies in quadrant III.

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

C) Given $\cos\theta = -\dfrac{2}{3}$ the angle θ lies in quadrant III.   **D)** Given $\tan\theta = -1$ the angle θ lies in quadrant II.

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

E) Given $\cos\theta = \dfrac{3}{5}$ the angle θ lies in quadrant IV.   **F)** Given $\sin\theta = \dfrac{1}{10}$ the angle θ lies in quadrant I.

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

Continued

G) Given: $\csc\theta = \dfrac{3}{2}$, and $\dfrac{\pi}{2} < \theta < \pi$

H) Given: $\cos\theta = \dfrac{3}{5}$, and $\dfrac{3\pi}{2} < \theta < 2\pi$

$\sin\theta =$ $\csc\theta =$

$\cos\theta =$ $\sec\theta =$

$\tan\theta =$ $\cot\theta =$

$\sin\theta =$ $\csc\theta =$

$\cos\theta =$ $\sec\theta =$

$\tan\theta =$ $\cot\theta =$

I) Given: $\csc\theta = \dfrac{2\sqrt{3}}{3}$, and $0° < \theta < 90°$

J) Given: $\sec\theta = -\sqrt{2}$, and $180° < \theta < 270°$

$\sin\theta =$ $\csc\theta =$

$\cos\theta =$ $\sec\theta =$

$\tan\theta =$ $\cot\theta =$

$\sin\theta =$ $\csc\theta =$

$\cos\theta =$ $\sec\theta =$

$\tan\theta =$ $\cot\theta =$

K) Given: $\cos\theta = -\dfrac{2}{5}$, and $\dfrac{\pi}{2} < \theta < \pi$

L) Given: $\tan\theta = -\dfrac{3}{7}$, and $270° < \theta < 360°$

$\sin\theta =$ $\csc\theta =$

$\cos\theta =$ $\sec\theta =$

$\tan\theta =$ $\cot\theta =$

$\sin\theta =$ $\csc\theta =$

$\cos\theta =$ $\sec\theta =$

$\tan\theta =$ $\cot\theta =$