

Unit 3 Test Review

This review requires **NO** Calculator

1. Determine the ratios for each trig function.

Sin A $\frac{8}{17}$

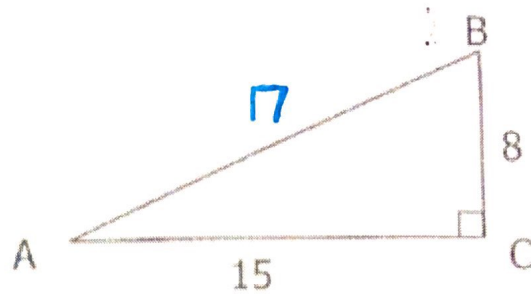
Cos A $\frac{15}{17}$

Tan A $\frac{8}{15}$

Sin B $\frac{15}{17}$

Cos B $\frac{8}{17}$

Tan B $\frac{15}{8}$



2. Determine the co-function ratios for each trig function for triangle ABC. Remember the $\sin \theta = \cos (90 - \theta)$

A. $\sin A = \frac{12}{13}$

$\cos B = \frac{12}{13}$

B. $\cos B = \frac{5}{3}$

$\sin A = \frac{5}{3}$

C. $\sin A = \frac{6}{13}$

$\cos B = \frac{6}{13}$

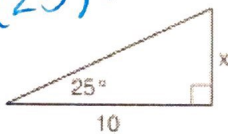
D. $\cos A = \frac{12}{13}$

$\sin B = \frac{12}{13}$

3. Solve for x algebraically to determine an expression that represents the length of a side, or an expression that represents an angle.

$\tan(25) = \frac{x}{10}$

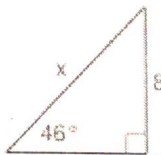
A.



$10 \cdot \tan(25) = x$

$\sin(46) = \frac{8}{x}$

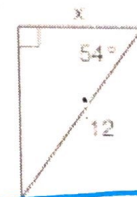
B.



$x = \frac{8}{\sin(46)}$

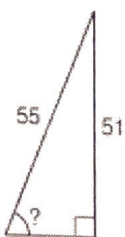
$\cos(54) = \frac{x}{12}$

C.



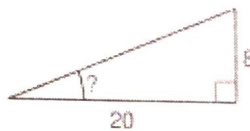
$x = 12 \cdot \cos(54)$

D.



$\sin^{-1}\left(\frac{51}{55}\right) = ?$

E.



$\tan^{-1}\left(\frac{8}{20}\right) = ?$

F.



$\cos^{-1}\left(\frac{8}{17}\right) = ?$