Trigonometry

Final Exam (entire course)

Convert from degrees to radians.

180˚ 60˚ 72˚ 144˚

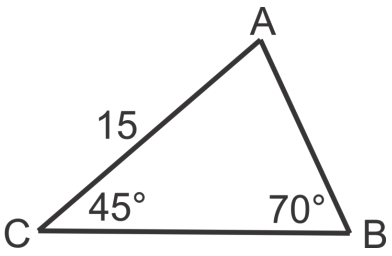
Convert from radians to degrees.

$\frac{\pi}{2}$ $\frac{3\pi}{2}$ $\frac{11\pi}{12}$ $\frac{5\pi}{12}$

Find the values of the following trig functions. <u>All angles are in radians</u>.

$\sin\frac{\pi}{6}$ $\tan 2\pi$ $\cot\frac{\pi}{4}$ $\cos\frac{\pi}{3}$

Find all angles and side lengths of this triangle. (not to scale)



Given that sin 37˚= 0.6018 , find:

cos 37˚ tan 37˚

Evaluate (i.e. solve) the following inverse trig functions. (You may express your answer in deg or rad.)

$\tan^{-1}\sqrt{3}$ (60 degrees) $\csc^{-1} 2$ $\sin\sec^{-1}\sqrt{2}$

Evaluate the following logarithms.

$log_5(525)$ $log_8(64\cdot 8)$ $log_2(64\cdot 8)$

Evaluate the following series.

$\sum_{n=1}^{\infty} 5^{-2n}$ $\sum_{n=5}^{\infty} 3^{-n}$ $\sum_{n=1}^{10} 2^{-n}$