Chapter 5 Review Game

$1-2\sin^2 67.5°$

$= \cos(2 \cdot 67.5)$

$\cos(135)$

$= -\frac{\sqrt{2}}{2}$

A∈Q4 + B∈Q1

$\cos\left(\arcsin(-3/5)+\cot^{-1}(3/4)\right) =$

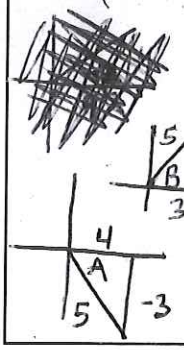
$\cos(A+B)$

$\cos A\cos B - \sin A \sin B$

$\left(\frac{4}{5}\right)\left(\frac{3}{5}\right) - \left(\frac{-3}{5}\right)\left(\frac{4}{5}\right)$

$\frac{12+12}{25}$

$\frac{24}{25}$



$$\frac{1}{\sin 30°\cos 105° + \sin 105°\cos 30°}$$

$\frac{1}{\sin(30+105)} = \frac{1}{\sin 135} = \frac{1}{\sqrt{2}/2}$

$= \csc 135$

$= \sqrt{2}$

$\cos\left(\frac{\pi}{12}\right) = \cos 15°$

$= \cos(60-45)$

$= \cos 60\cos 45 + \sin 60 \sin 45$

$\frac{1}{2}\cdot\frac{\sqrt{2}}{2} + \frac{\sqrt{3}}{2}\cdot\frac{\sqrt{2}}{2}$

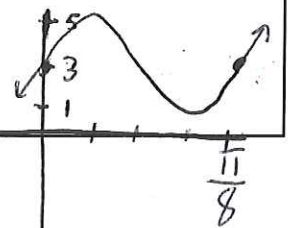
$\frac{\sqrt{2}+\sqrt{6}}{4}$

$y = 12\sin 8x\cos 8x + 3$

$y = 6(2\sin 8x\cos 8x) + 3$

$y = 2\sin(2\cdot 8x) + 3$

$y = 2\sin 16x + 3$



Period $= \frac{2\pi}{B} = \frac{2\pi}{16} = \frac{\pi}{8}$