

PRINT Your Name: _____

Quiz for June 21, 2012

The quiz is worth 5 points. **Remove EVERYTHING from your desk except this quiz and a pen or pencil.** SHOW your work. Express your work in a neat and coherent manner. BOX your answer.

Find $\mathcal{L}(\cos^2 2t)$.

ANSWER: We have $\mathcal{L}(\cos^2 2t) = \frac{1}{2}\mathcal{L}(1 + \cos(4t)) = \frac{1}{2}\left(\frac{1}{s} + \frac{s}{s^2+16}\right)$.