MATH 2340 WARM-UP PROBLEMS

1. Assuming that $F(s)$ is the Laplace transform of $f(t)$ ($\mathcal{L}\{f(t)\} = F(s)$), determine the appropriate values for the constants a, b, and c.

$$f(t) = at - \frac{1}{8}\sin(2t)$$

$$F(s) = \frac{1}{s^b\,(s^2 + c)}$$