HW8 Answers

p.319 #4. Since the unit of the air resistance is "pound", the equation reads

$$mv'(t) = mg - \frac{3}{4}v(t)g$$

where $m = 192$, $g = 32$, $0 \leq t \leq 10$; similarly for $t \geq 10$

p.320 #7. Answers on the book

p.320 #8. Note that the temperature function is of the form $y(t) = C_1 + C_2e^{-kt}$. Use the conditions to determine the constants C_1, C_2, k.