

Honors Calculus, Math 1451- HW 2. Due Tuesday March 1.

Dr Matthew Nicol, PGH 665

(1) Questions in 14.4:
12, 14, 18, 40, 42.

(2) Questions in Section 14.5:
6, 8, 14, 22, 46, 48

(3) Questions in 14.6: 4, 6, 8, 12, 16, 31, 37,

(4) Show that $e^{-\frac{\alpha^2 \pi^2}{L^2} t} \sin\left(\frac{\pi x}{L}\right)$ is a solution of the heat equation $u_t = \alpha^2 u_{xx}$ with the boundary conditions $u(0, t) = u(L, t) = 0$.