

Exercise 5

- (a) Find the steady-state temperature distribution inside an annular plate $\{1 < r < 2\}$, whose outer edge ($r = 2$) is insulated, and on whose inner edge ($r = 1$) the temperature is maintained as $\sin^2 \theta$. (Find explicitly all the coefficients, etc.)
- (b) Same, except $u = 0$ on the outer edge.