Name: $\qquad$
Task Master: $\qquad$ Cynic: $\qquad$ Recorder: $\qquad$

MTH 254
THE HEATER Spring 2015
Working in small groups (3 or 4 people), solve as many of the problems below as possible. Try to resolve questions within the group before asking for help. Each group member should then write up the solutions in their own words; Show your work! Full credit will only be given if your answer is supported by calculations and/or explanations as appropriate.


1. The figure above shows the temperature $T$ at a position $x$ feet from the corner of the room, $t$ hours after the heater is turned on. You are standing 15 feet from the corner 20 hours after the heater is turned on. How fast is the temperature changing?
