

PROBLEM 6: THE SNOW PLOW PROBLEM  
UNDERGRADUATE PROBLEM SOLVING CONTEST  
DUE APRIL 16, 2009 BY 5:00 PM

One morning it started snowing at a heavy and constant rate. A snowplow started out at 8:00 am. At 9:00 am it had gone 2 miles. By 10:00 am it had gone 3 miles. Assuming that the snowplow removes a constant volume of snow per hour, determine the time (to the nearest second) at which it started snowing.

In the spirit of the UPSC, you should not search the internet or look the solution up in a book.