2a. An equation looks like this: $3^2 = 9$. Variables, like $x$, should have dollar signs too.

2b. Empty lines.

3. $N$ has $M$ and $x$ hard coded. On input $y$, $N$ does the following:
   
   i. Saves $y$.
   
   ii. Runs $M$ on $x$ for $|y|$ steps.
   
   iii. Accepts $y$ if $M$ on $x$ has not yet halted. Otherwise, $N$ loops.

4. algorithm (G):
   
   \begin{verbatim}
   s.dist = 0
   prev_dist = {}
   for each edge (v,u) in E:
     if u.dist > v.dist + W_v,u:
       print( Error: Negative cycle!)
   \end{verbatim}