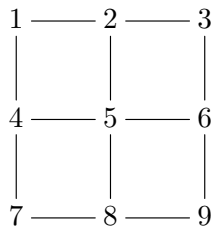


Name \_\_\_\_\_

*No aids allowed. Answer all questions on test paper. Use backs of sheets if necessary.*

Consider the following graph where the cost of all the edges is exactly 1:



Fill out the array for the 10 possible values of  $k$  ( $k \in \{0, 1, 2, \dots, 9\}$ ) and use it to establish the length of the shortest path from 1 to 9. Use a pencil (and eraser) to go back and forth.

$k =$									

$k =$									

Also, now that you have the tables, use them to “reverse engineer” the actual shortest path from 1 to 9.