Assignment 07

Alex Clemmer

Student number: u0458675

1

 $1 < \log_3 9$, so T(n) in this case would be $O(n^{\log_3 9}) = O(n^2)$.

$\mathbf{2}$

 $1 = \log_3 3$, so T(n) in this case would be $O(n^1 \log n)$.

3

 $3 > \log_4 5$, so $O(n^3)$.

4

 $1 > \log_3 2$, so $O(n^1)$.

$\mathbf{5}$

 $2 = \log_4 16$, so $O(n^2 \log n)$.

6

 $0 < \log_3 1$, so $O(n^0 \log n)$