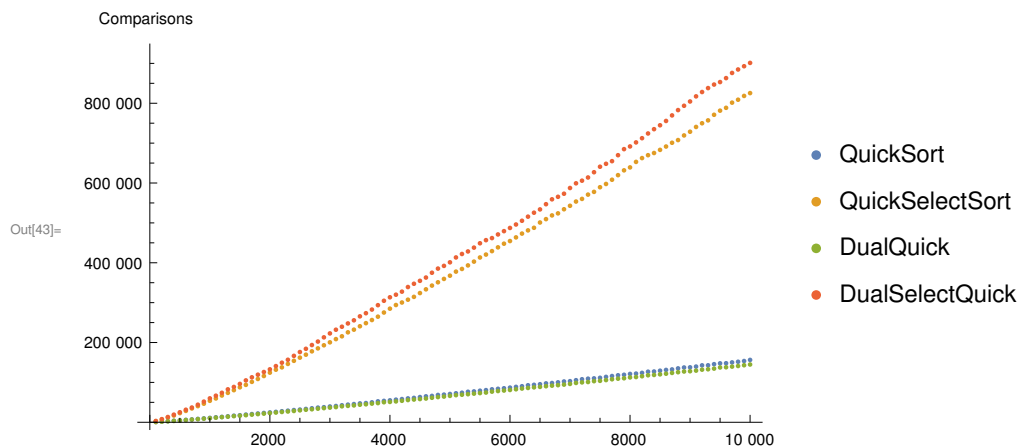
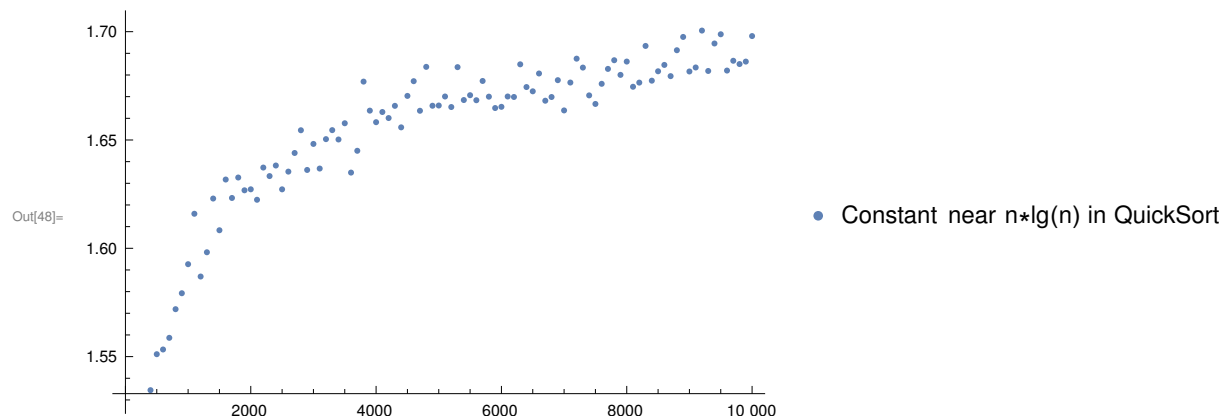
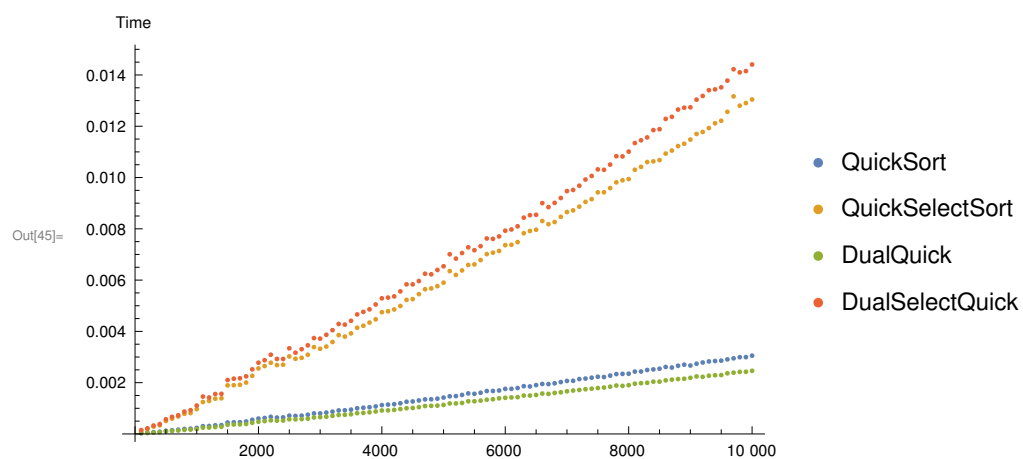
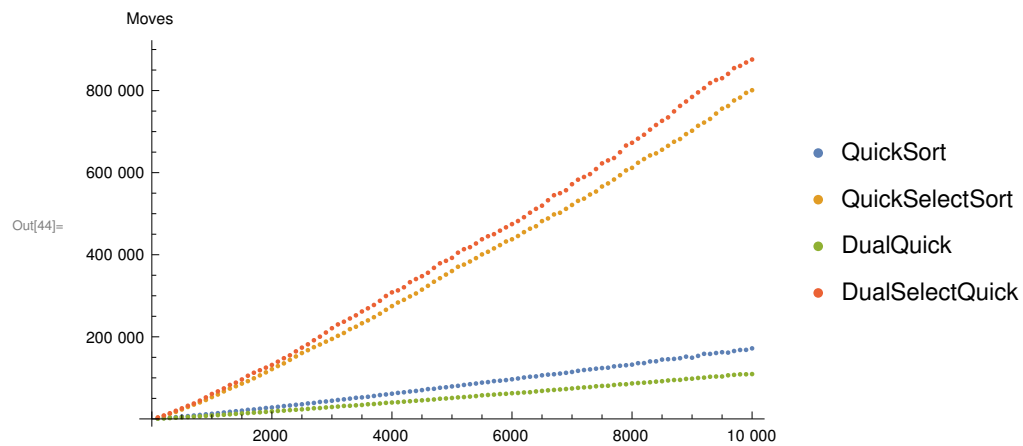
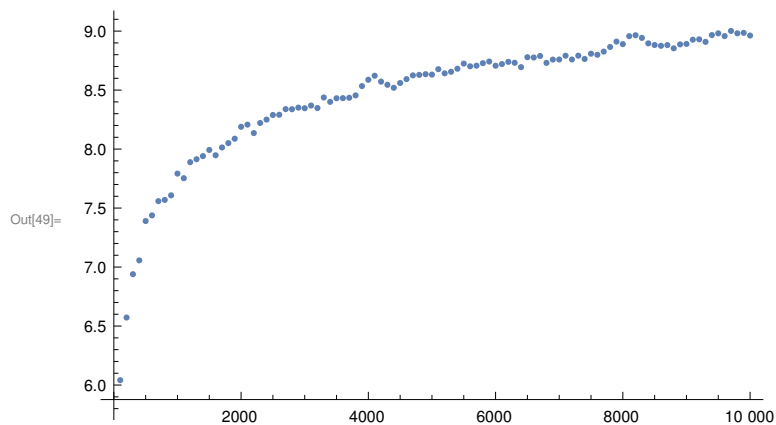


In[43]:=

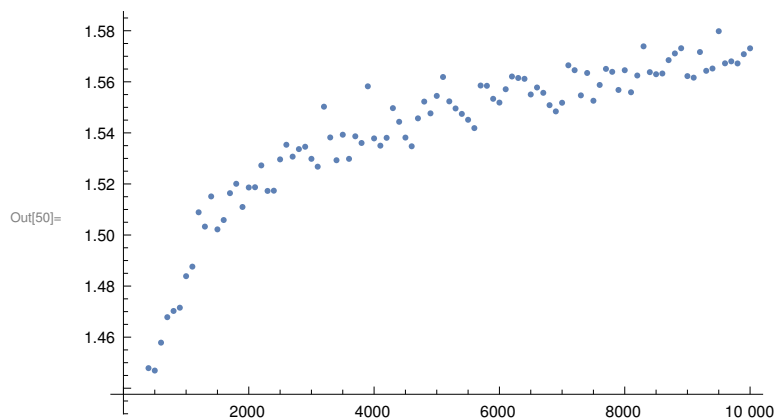
```
ListPlot[{quickComp, selectComp, dQuickComp, dSelectComp}, AxesLabel → "Comparisons ",  
  PlotLegends → {"QuickSort ", "QuickSelectSort ", "DualQuick ", "DualSelectQuick "}]  
ListPlot[{quickMoves, selectMoves, dQuickMoves, dSelectMoves}, AxesLabel → "Moves",  
  PlotLegends → {"QuickSort ", "QuickSelectSort ", "DualQuick ", "DualSelectQuick "}]  
ListPlot[{quickTime, selectTime, dQuickTime, dSelectTime}, AxesLabel → "Time",  
  PlotLegends → {"QuickSort ", "QuickSelectSort ", "DualQuick ", "DualSelectQuick "}]  
  
f[x_] := Log[x];  
With[{x := 100 xp}, tab = Table[{x, f[x]}, {xp, 1, 100}]];  
ListPlot[{quickCompToSize / GroupBy[tab, First → Last, Mean]],  
  PlotLegends → {"Constant near  $n \lg(n)$  in QuickSort "}]  
ListPlot[{selectCompToSize / GroupBy[tab, First → Last, Mean]],  
  PlotLegends → {"Constant near  $n \lg(n)$  in QuickSelectSort "}]  
ListPlot[{dualCompToSize / GroupBy[tab, First → Last, Mean]],  
  PlotLegends → {"Constant near  $n \lg(n)$  in dual-pivot Quicksort "}]  
ListPlot[{dualSelectCompToSize / GroupBy[tab, First → Last, Mean]],  
  PlotLegends → {"Constant near  $n \lg(n)$  in dual-pivot_select Quicksort "}]
```



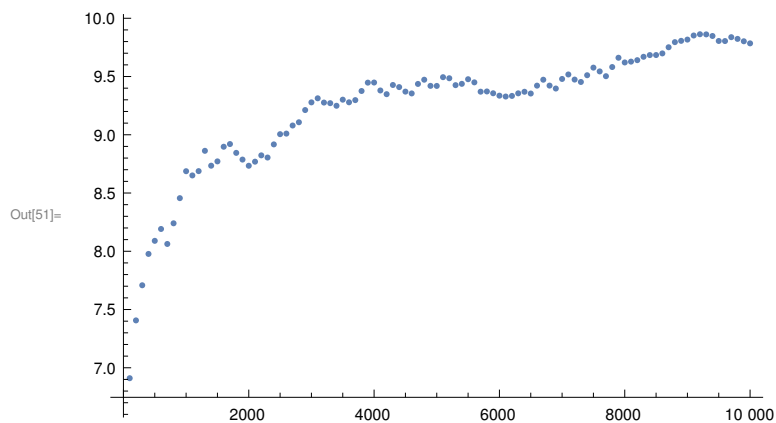




• Constant near  $n \cdot \lg(n)$  in QuickSelectSort



• Constant near  $n \cdot \lg(n)$  in dual-pivot Quicksort



• Constant near  $n \cdot \lg(n)$  in dual-pivot\_select Q

