Part B

$T_1 = 40.673537$
$T_2 = 26.294879$
$T_4 = 14.250760$
$T_8 = 7.399478$

Speedup
$S(1) = 1$
$S(2) = 1.546823$
$S(4) = 2.854130$
$S(8) = 5.496811$

Parallel Efficiency
$E(1) = 1$
$E(2) = 0.773411$
$E(4) = 0.713532$
$E(8) = 0.687101$