Observations

If an operation executes in parallel, then doubling the number of processors (while maintaining the same message size) should take about the same amount of time.

Review

1. blocking point-to-point routines, use two procs (mpi_send, mpi_recv, mpi_sendrecv, mpi_sendrecv_replace)
2. collective routines, use all procs (mpi_barrier, mpi_bcast, mpi_reduce, mpi_gather, mpi_scatter, mpi_alltoall)
3. non-blocking point-to-point, avoid deadlocks and allow communication/computation occur concurrently