## Graphing Distance, Displacement, Speed and Velocity Worksheet

1. Given the following mapping directions create distance and displacement vs. time graphs for the motion.

Emily ran $2 \mathrm{~m}[\mathrm{E}]$ in $3 \mathrm{~s}, 5 \mathrm{~m}[\mathrm{~W}]$ in $2 \mathrm{~s}, 1 \mathrm{~m}[\mathrm{~W}]$ in $2 \mathrm{~s}, 5 \mathrm{~m}[\mathrm{E}]$ in 3 s

2. Given the following mapping directions create distance and displacement vs. time graphs for the motion.

Kurtis ran $4 \mathrm{~m}[\mathrm{E}]$ in $2 \mathrm{~s}, 5 \mathrm{~m}[\mathrm{~W}]$ in $2 \mathrm{~s}, 3 \mathrm{~m}[\mathrm{~W}]$ in $1 \mathrm{~s}, 2 \mathrm{~m}[\mathrm{E}]$ in 5 s


3. Given the following mapping directions create speed and velocity vs. time graphs for the motion.

Josh ran $4 \mathrm{~m}[\mathrm{E}]$ in $2 \mathrm{~s}, 5 \mathrm{~m}[\mathrm{~W}]$ in $1 \mathrm{~s}, 3 \mathrm{~m}[\mathrm{~W}]$ in $1 \mathrm{~s}, 2 \mathrm{~m}[\mathrm{E}]$ in 2 s

4. Given the following mapping directions create speed and velocity vs. time graphs for the motion.

Cody ran $10 \mathrm{~m}[\mathrm{E}]$ in $5 \mathrm{~s}, 5 \mathrm{~m}[\mathrm{~W}]$ in $2 \mathrm{~s}, 6 \mathrm{~m}[\mathrm{~W}]$ in $1 \mathrm{~s}, 7 \mathrm{~m}[\mathrm{E}]$ in 2 s


5. For each of the following graphs provided the original mapping directions.
Distance vs. Time

Distance (m)


Time (s)

Displacement vs. Time
b)

Displacement (m)
[N]


Time (s)
6. For each of the following graphs provided the original mapping directions.

Speed vs. Time



