

MATHCOUNTS[®] Problem of the Week Archive

New Year's Resolution – January 6, 2025

Problems

Jean made a New Year's resolution to get in shape. She decides to run for 30 minutes on Tuesdays, Thursdays, Saturdays and Sundays. If Jean plans to run at an average speed of 6 mi/h, how many miles will she run during the month of February 2025?

After some consideration, Jean decides that it might be better to run at an average speed of 5.0 mi/h on her first day of running in February and then increase her average speed by 0.1 mi/h each day she runs. How many fewer miles will she run than if she were to run at an average speed of 6.0 mi/h each time she runs?

By following the new plan, by what percent will Jean have increased her average speed from the first running day in February to the last running day in February?