

Week of February 5, 2018

Fido is sitting on his favorite spot on a straight path. Cris, who is 1 meter away, starts walking along the path at a speed of 1 m/s. Fido immediately starts running between his spot and Cris at a speed of 3 m/s. Treating Fido's turns as taking negligible time, find $f(n)$, the distance Fido has run after returning to his spot n times.