

PROBLEM OF THE MONTH, APRIL 2018

Problem. A firehouse is located at the intersection of two perpendicular roads in the middle of a large field. A firetruck averages 60mph when driving along any of the two roads but only 15mph when driving through the field. A point M is called *salvageable* if a firetruck leaving the firehouse can reach location M within 10 minutes. Find with proof the area of the region consisting of salvageable points.

Submit your solutions to professor Dan Ismailescu, Mathematics Department via email at dan.p.ismailescu@hofstra.edu, or bring it in person at 103C Roosevelt Hall.