

Name _____

Student Number _____

Show all work. Write neatly. Label your answers clearly.

1. Jill starts jogging East along a path at 10 feet per second. A sprinkler positioned 50 yards East and 4 yards North of Jill's starting point is spraying water in a circle with radius 5 yards.

(a) How much of the path is watered by the sprinkler?

(b) When does Jill get wet?

2. There is an oak tree 8 yards South and 10 yards East of Jill's starting point. What is the straight-line distance from Jill to the oak tree, 4 seconds after she starts jogging?