

PQ #6

MTH 1825 Practice Quiz for Systems of Linear Equations – Word Problems

Write a system of equations and solve it algebraically.

1. The Griffin family and Mitchell family each used their sprinklers last summer. The water output rate for the Griffin family's sprinkler was 35 L per hour. The water output rate for the Mitchell family's sprinkler was 20 L per hour. The families used their sprinklers for a combined total of 70 hours, resulting in a total water output of 1850 L. How long was each sprinkler used?

Griffin sprinkler: \_\_\_\_\_ Mitchell sprinkler: \_\_\_\_\_

2. A chef is using a mixture of two brands of Italian dressing. The first brand contains 5% vinegar, and the second brand contains 10% vinegar. The chef wants to make 350 mL of a dressing that is 9% vinegar. How much of each brand should she use?

First brand: \_\_\_\_\_ Second brand: \_\_\_\_\_