## Middle School Actuarial Exam

## Problem 1: Addition

Sarah is an actuary at LifeSecure Insurance Company. On Monday, she received 120 new applications for life insurance policies. On Tuesday, she received another 150 applications. On Wednesday, she received 90 more applications. How many total applications did Sarah receive over the three days?

## Problem 2: Subtraction

John is an actuary working for a company that manages pension funds. At the beginning of the year, the pension fund had $\$ 10,000$ in it. The company paid out $\$ 3,500$ in pensions to retired employees during the year. How much money was left in the pension fund at the end of the year?

## Problem 3: Division

Emily is an actuary at a health insurance company. The company collected a total of $\$ 12,000$ in monthly premiums from 200 policyholders. How much did each policyholder pay on average for their monthly premium?

## Problem 4: Multiplication

Michael is an actuary at a car insurance company. Each car insurance policy costs $\$ 250$ per year. If 80 people buy a car insurance policy, how much total revenue will the company earn from these policies?

