Use an arithmetic or geometric sequence to answer each question.

1. The PV social committee had raised $70 for homecoming by the 2nd week of school. If they raised $95 by the 3rd week and $120 by the 4th week, how much money will they have earned by the 10th week?

2. At the Cubs 1st game they sell out to a crowd of 41,200 fans. Due to their poor performance they lose 450 in attendance each game. How many seats will be filled at the last game of the year if they play 81 home games?

3. Mr. Sacco's apple trees produced 10 apples in the 2nd year. If they increase in production by 25% each year, how many apples will he have in 10 years?

4. You deposit $1,500 into a savings account. If your account grows by 4% each year, how much money will be in the account after 100 years?

5. You drop a tennis ball off the top of the school from a height of 30 feet. If the ball loses 23% of its height on each bounce, how high will the ball bounce on the 12th bounce?

6. A bacteria population starts with 500 cells. If the population doubles every hour, how many cells will there be in 12 hours?

7. Mrs. Pischke inherited a tree farm in 2014 with 18 rows of evergreen trees. In 2016 she has 24 rows of trees. If she continues to plant new rows of trees at a constant rate, how many rows of trees will she expect to have in 2030?

8. Mr. Belby runs 8 miles in the month of January, 14 miles in February, and 24.5 miles in March. If he continues this pattern, how many will he run in October?