

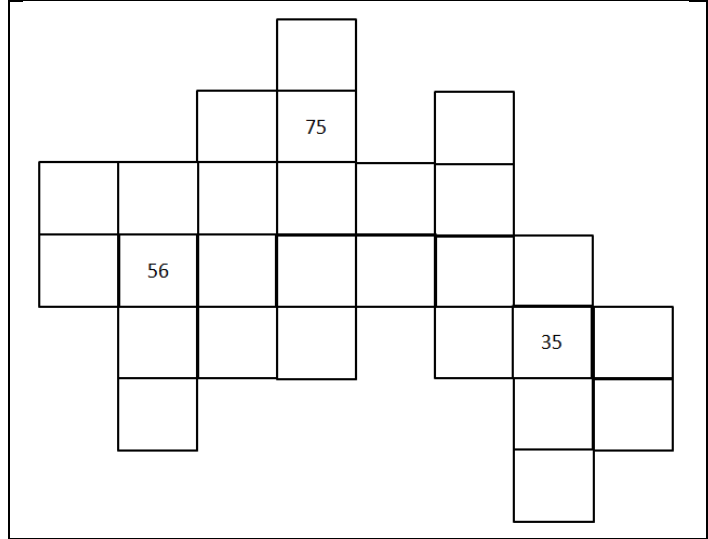
Exploring the World of Math

Name: _____ Date: _____

Population Density

1. Maxim counts 12 deer in a 100 acre area. We want to estimate the number of deer in the 1600 acre reserve. Using the above density, how many deer are in the preserve?

2. Terry counts the deer in his preserve. He divided the entire area into square miles. He counted deer in three areas. What is the estimated number of deer in the preserve?



Population Growth

3. We estimate the rate of growth in the population of buffalo to be 6%. Using $N = N_0e^{rt}$ where the initial population is 800, what can we estimate the population to be in 10 years if this group is protected? $e = 2.71828$
4. Today, the world's population is 7.052 billion. If the present rate of growth is 1.8% and is expected to maintain at that level, what will the estimated population be in 2032?
5. If we calculate the rate of growth formula using t equals $1 \div 365$, how many new people join us on Earth every day?

