

1. Chris invests \$3000 at 6% per annum compounded annually. How many years will it take for his investment to triple in value? (to the nearest year).
2. Mr. Sanchez was working late in the Chemistry lab and discovered a new element. He named it Alicium because it glowed almost as radiant as his sweetheart. After 45 days, only 62% of the original sample remained. What is the half-life of Alicium? (to the nearest tenth of a day).
3. The population of an ant nest can increase five-fold in 4 weeks. If the original ant population is 300, find the population in 25 weeks.
4. How many times as intense was the earthquake in Alaska in 1964 than the earthquake in Turkey in 1966? (to the nearest tenth)
Alaska – Magnitude of the earthquake = 8.9
Turkey – Magnitude of the earthquake = 6.4
5. Due to acid rain, the pH value of a lake became 4.7, killing all the fish. In order to support fish, the acidity of the lake must be decreased eight-fold. What will the new pH of the lake be in order to support fish life? (to the nearest tenth)