

Formula	G/D	Amount	Rate %	Time
$f(t) = 500(1+.25)^{10}$				
$f(t) = 200(0.75)^5$				
$f(t) = 100(1.33)^2$				
$f(t) = 1000(1-0.001)^{10}$				

1. A hunk of a radioactive material was discovered in Russia! The hunk currently has 260 atoms in it but is decaying at a rate of 8% a month.

a. Write out your exponential function $f(t)$

b. How many atoms will be left in 4 months?

c. in 2 years?

2. Malik bought a new car for \$ 15,000. As he drove it off the lot, his best friend, Will, told him that the car's value just dropped by 15% and that it would continue to depreciate 15% of its current value each year.

a. Write out your exponential function $f(t)$

b. How much will the car be worth after 5 years?

c. Malik sells his car after Y years for \$4,800. What does Y equal?

