MATH 34A LIMITS

Compound Interest

P_0 =initial amount of money
$r\%$ =annual interest rate
t =number of years after starting point
$M(t)$ =amount of money after t years

If the interest is **compounded annually**, then

1. A bank pays 3% interest compounded annually. There is $1500 in the account in 2000.

a) How much money will there be in the account in 2001?

b) How much money will there be in the account in 2002?

c) How much money will there be in the account in 2003?

d) How much money will there be in the account t years after 2000?

e) How long will it take until there is $5,000,000$ in the account?

Limits

$$\lim_{x \to a} f(x) =$$

Numerically-Graphically-Algebraically:

$\lim\limits_{x \to 2}(2x+1)$

$\lim\limits_{x \to 3}\sqrt{x}$

$\lim\limits_{x \to 1}\frac{x-1}{x^2-1}$

$\lim\limits_{x \to \infty}\frac{1}{x}$

$\lim\limits_{x \to \infty}\frac{3x+1}{-2x+5}$