```
r=1;
x=1;
n=6;
m=sqrt(r*r-x*x/4);
i=1;
while (i<30)
    printf("i=%d n=%d PI-T=%20.18f\n",i,n,pi-m*x*n/2);
    x1=sqrt(x*x/4+(r-m)*(r-m));
    m1=sqrt(r*r-x1*x1/4);
    x=x1;
    m=m1;
    n=n*2;
    i=i+1;
    endwhile
```

```
arctg1=0;
ej=-1;
log10n=0;
for n=1:100000
    ej=-1*ej;
    arctg1=arctg1+1/(ej*(2*n-1));
    if (10*log10n<=n)
        printf("Eltérés a(z) %d. lépésben: %20.18f\n",n,pi-4*arctg1);
        log10n=n;
        endif
    endfor
```

```
arctg1=0;
ej=-1;
for n=1:50
    ej=-1*ej;
    arctg1=arctg1+1/(ej*(2*n-1));
    printf("Eltérés a(z) %d. lépésben: %20.18f\n",n,pi-4*arctg1);
    endfor
```

```
r=1;
x=1;
n=6;
m=sqrt(r*r-x*x/4);
i=1;
while (i<30)
    printf("i=%d n=%d m=%20.18f\n",i,n,m);
    x1=sqrt(x*x/4+(r-m)*(r-m));
    m1=sqrt(r*r-x1*x1/4);
    x=x1;
    m=m1;
    n=n*2;
    i=i+1;
    endwhile
```

```
log2=0;
ej=-1;
log10n=0;
for n=1:100000
    ej=-1*ej;
    log2=log2+1/(ej*n);
    if (10*log10n<=n)
        printf("Eltérés a(z) %d. lépésben: %20.18f\n",n,log(2)-log2);
        log10n=n;
        endif
    endfor
```

```
log2=0;
ej=-1;
for n=1:50
    ej=-1*ej;
    log2=log2+1/(ej*n);
    printf("Eltérés a(z) %d. lépésben: %20.18f\n",n,log(2)-log2);
    endfor
```

```
for n=1:25
printf("2.72/%d!=%20.18f\n",n,2.72/faktorialis(n));
endfor
```

```
x=1;
n=maxN=20
expx=1+x/n;
expx_octave=exp(x);
for i=1:maxN-1
    printf("n=%d T(n)=%20.18f\n",n,expx);
    n=maxN-i;
    expx=1+x/n*expx;
    endfor
printf("T(n)=%20.18f\n",expx);
printf("Eltérés: %20.18f\n",expx_octave-expx);
```

```
for n=1:25
printf("(PI/2)^%d/%d!=%20.18f\n",n,n,(pi/2)^n/faktorialis(n));
endfor
```

```
#! /usr/bin/octave -qf
t = 0;
for n = 1:1000
 if (prim_e(n)) t = t + 1/(n*n);
 endif
endfor
t
```

```
#! /usr/bin/octave -qf
s = 0;
for n = 1:100
 s = s + 1/(n*n);
endfor
printf ("%8.6f\n", s);
```