

Rekurentní posloupnost

```
> rsolve({a(n+1)=1/2*(a(n-1)+a(n))}, a);
```

$$\frac{1}{3}a(0) + \frac{2}{3}a(1) + \frac{1}{2}\left(\frac{4}{3}a(0) - \frac{4}{3}a(1)\right)\left(\frac{-1}{2}\right)^n$$

```
> rsolve({a(n+1)=1/2*(a(n-1)+a(n)), a(1)=1, a(2)=2}, a);
```

$$\frac{4\left(\frac{-1}{2}\right)^n}{3} + \frac{5}{3}$$

```
> limit(%, n=infinity);
```

$$\frac{5}{3}$$

```
>
```