Lifecontingencies package numerical accuracy test

Giorgio Spedicato

November 18, 2012

1 Introduction

This vignette shows numerical tests that compares lifecontingencies computations with figure shown in published textbooks.

```
R> #load lifecontingencies package
R> library(lifecontingencies)
```

2 Actuarial mathematics

[Bowers and of Actuaries, 1986, p 111], whole life insurance., at 4%.

```
R> data(soa08Act)
R> #should be 0.01577285
R> Axn(soa08Act, x=30, n=10, i=0.04)
```

[1] 0.01577283

[Bowers and of Actuaries, 1986, p 112], at 6%.

```
R> #should be 102.4835
R> 1000*Axn(soa08Act, x=30,i=0.06)
```

References

[1] 102.4835

[Bowers and of Actuaries, 1986] Bowers, N. and of Actuaries, S. (1986). *Actuarial mathematics*. Society of Actuaries.