

# CH3 Concepts and Definitions

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## 1 CH3

### 1.1 Annuities Basic

$$a + ar + ar^2 + \dots + ar^{n-1} = a \frac{1 - r^n}{1 - r}$$

1. immediate = end of each payment period

(a)  $a_{\overline{n}|i}$  and  $s_{\overline{n}|i}$

(b) "END"

2. due = beginning of each payment period

3. a with double dot

### 1.2 loans with slightly reduced final payment

### 1.3 perpetuities

$$a_{\infty|i} = \frac{1}{i}$$

$$\text{double dot } a_{\infty|i} = \frac{1}{d}$$