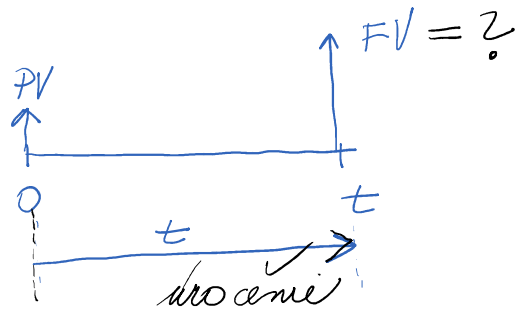


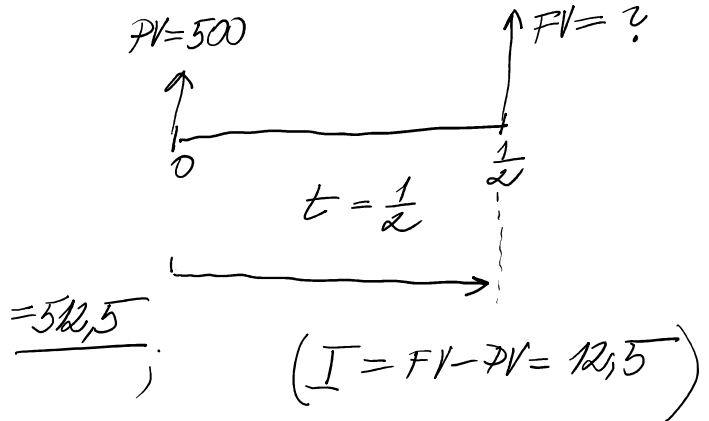
JEDNODUCHĚ ÚROKOVANIE

$$FV = PV(1 + it)$$



PR: $PV = 500$
 $i = 0,05$
 $t = \frac{1}{2}$
 $FV = ?$

$$FV = PV(1 + it) = 500(1 + 0,05 \cdot \frac{1}{2})$$



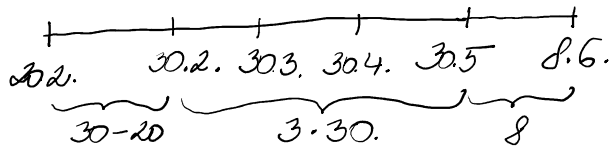
PR 20.2.2012 → 8.6.2012

$PV = 500$
 $i = 0,06$
 $I = ?$

$I = PV \cdot i \cdot t$

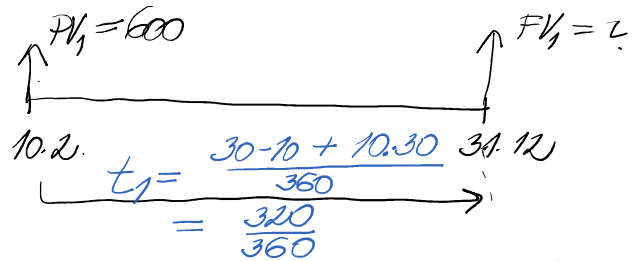
$$I = 500 \cdot 0,06 \cdot \frac{108}{360} = 9$$

NEMECKÝ ŠTANDARD

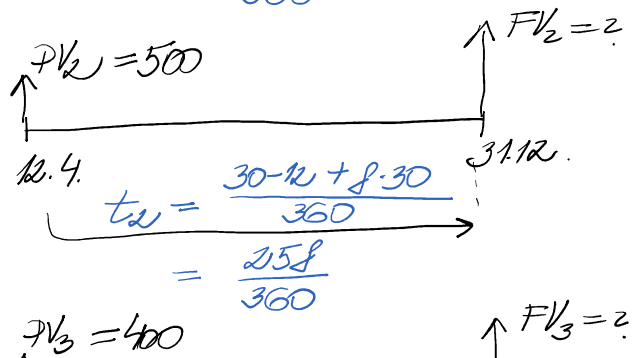


$$t_1 = \frac{30-20 + 3 \cdot 30 + 8}{360} = \frac{108}{360}$$

PR $PV_1 = 600$ 10.2. → 31.12.
 $PV_2 = 500$ 12.4. → 31.12.
 $PV_3 = 400$ 16.6. → 31.12.
 $i = 0,03$
 $I = ?$
 $FV = ?$



$FV = FV_1 + FV_2 + FV_3$
 $PV = PV_1 + PV_2 + PV_3$
 $I = FV - PV$



$$FV = PV(1 + it)$$

$$FV = PV(1+it)$$

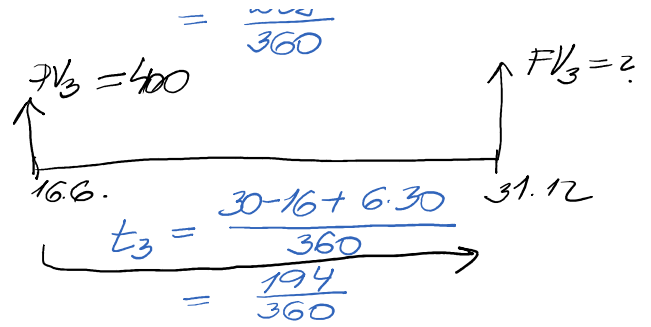
$$FV_1 = 600 \left(1 + 0,03 \cdot \frac{30}{360}\right) = 616$$

$$FV_2 = 500 \left(1 + 0,03 \cdot \frac{28}{360}\right) = 510,75$$

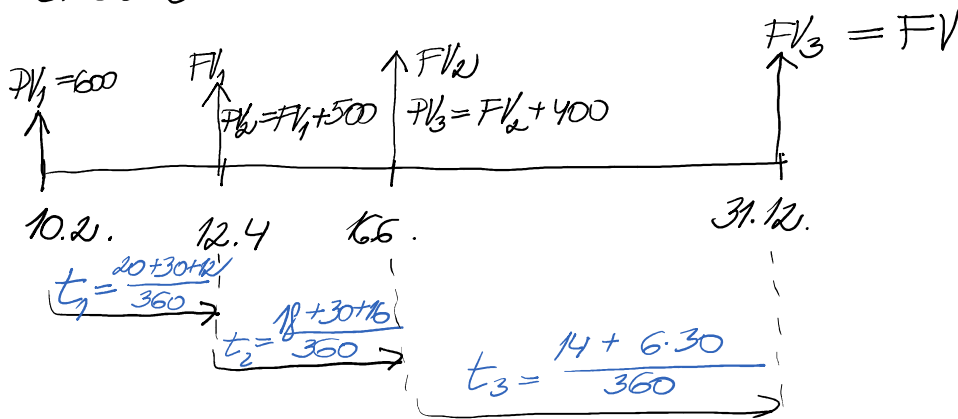
$$FV_3 = 400 \left(1 + 0,03 \cdot \frac{194}{360}\right) = 406,47$$

$$FV = 616 + 510,75 + 406,47 = 1533,22$$

$$I = FV - PV = 1533,22 - (600 + 500 + 400) = 33,22$$



INÝ SPÔSOB RIEŠENIA



VÝPOČET SÚČASNEJ HODNOTY = ODÚROČENIE

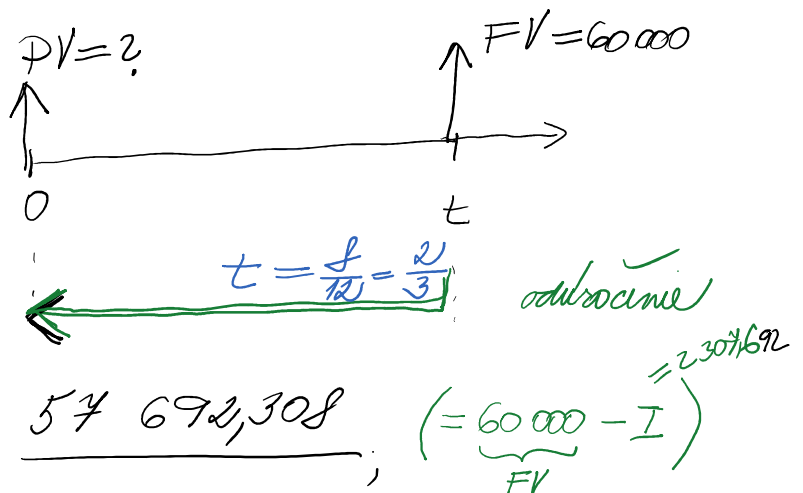
$$FV = PV(1+it) \longrightarrow PV = \frac{FV}{1+it}$$

PR. $FV = 60\ 000$
 $i = 0,06$
 $t = \frac{8}{12} = \frac{2}{3}$

$$PV = ?$$

$$PV = \frac{FV}{1+it}$$

$$PV = \frac{60\ 000}{1 + 0,06 \cdot \frac{2}{3}} = 57\ 692,308; \quad (= \underbrace{60\ 000}_{FV} - I)$$

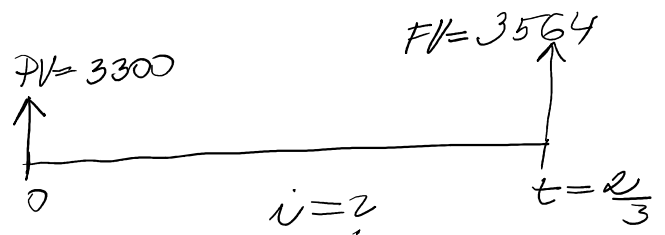


VÝPOČET ÚROKOVEJ MIERY

$$FV = 3564$$

PR. $PV = 3300$
 $FV = 3564$
 $t = \frac{8}{12} = \frac{2}{3}$

$i = ?$



$$FV = PV(1 + it)$$

$$3564 = 3300(1 + i \cdot \frac{2}{3}) \quad | : 3300$$

$$\frac{3564}{3300} = 1 + i \cdot \frac{2}{3} \quad | - 1$$

$$\frac{2}{3} i = \frac{3564}{3300} - 1 \quad | \cdot \frac{3}{2} \quad (: \frac{2}{3})$$

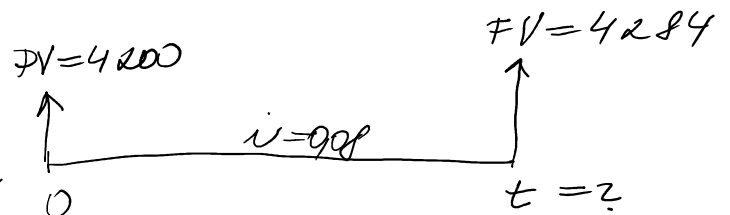
$$i = \left(\frac{3564}{3300} - 1 \right) \cdot \frac{3}{2} = 0,12$$

$$i \cdot 100\% = 0,12 \cdot 100\% = \underline{12\%}$$

VÝPOČET ÚROKOVĚHO OBDOBÍ

PR $PV = 4200$
 $FV = 4284$
 $i = 9,08$

$t = ?$ (měsíců)



$$FV = PV(1 + it)$$

$$4284 = 4200(1 + 9,08 t) \quad | : 4200$$

$$\frac{4284}{4200} = 1 + 9,08 t \quad | - 1$$

$$9,08 t = \frac{4284}{4200} - 1 \quad | : 9,08 \quad (= \cdot \frac{100}{8})$$

$$t = \left(\frac{4284}{4200} - 1 \right) \cdot \frac{100}{8} = 0,25$$

počet měsíců: $0,25 \cdot 12 = \underline{3 \text{ měsíce}}$

MATEMATICKÝ DISKONT

$$D_m = \frac{FV \cdot i \cdot t}{1 + i \cdot t} \quad (= I)$$

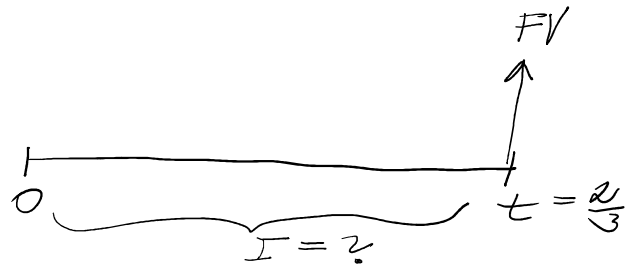
PR. $FV = 60\,000$
 $i = 0,06$

FV

PR. $FV = 60\ 000$
 $i = 0,06$
 $t = \frac{8}{12} = \frac{2}{3}$

$D_m = ?$

$$D_m = \frac{FV \cdot i \cdot t}{1 + i \cdot t} = \frac{60\ 000 \cdot 0,06 \cdot \frac{2}{3}}{1 + 0,06 \cdot \frac{2}{3}} = 2\ 304,692$$



OBCHODNÝ DISKONT

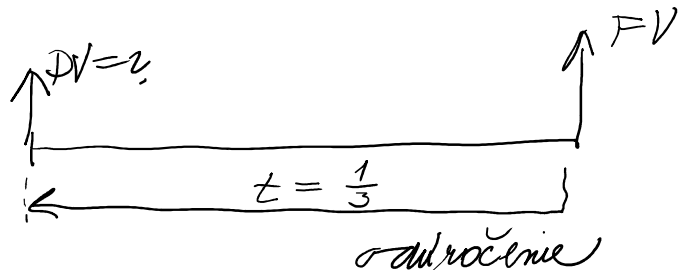
$$D_o = FV \cdot i \cdot t$$

$$PV = FV (1 - t \cdot d)$$

PR: $FV = 15\ 000$
 $d = 0,2$
 $t = \frac{4}{12} = \frac{1}{3}$
 $PV = ?$

$$PV = FV (1 - t \cdot d) = 15\ 000 (1 - \frac{1}{3} \cdot 0,2) = 14\ 000$$

ODÚROČENIE DISKONTOVANÍM



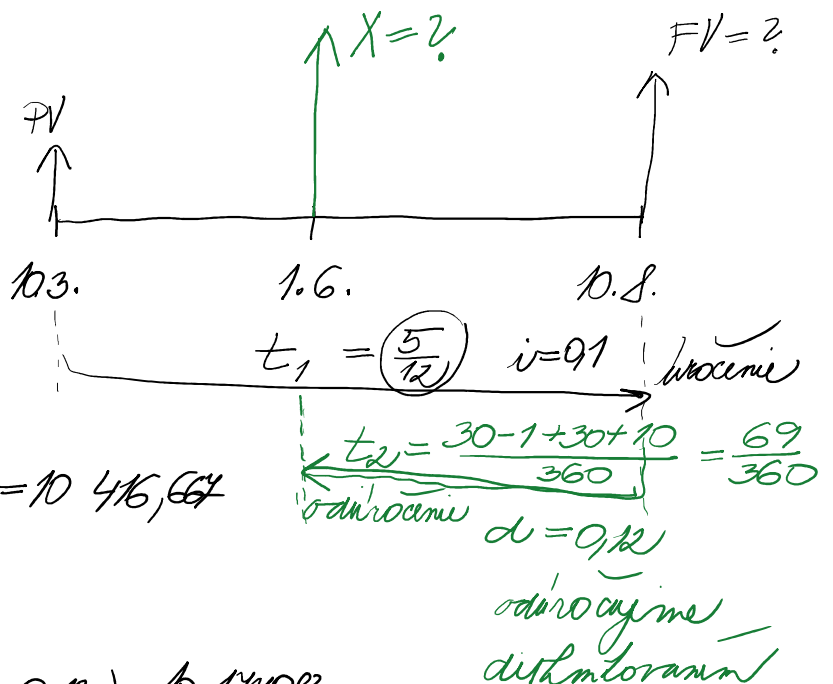
$$(D_o = FV - PV = 1000)$$

ZMENKY

PR. $PV = 10\ 000$
 $i = 0,1$
 $d = 0,12$
 $t_1 = \frac{5}{12}$
 $t_2 = \frac{69}{360}$
 $X = ?$

$$FV = PV (1 + i \cdot t_1) = 10\ 000 (1 + 0,1 \cdot \frac{5}{12}) = 10\ 416,667$$

$$X = FV (1 - t_2 \cdot d) = 10\ 416,667 (1 - \frac{69}{360} \cdot 0,12) = 10\ 174,083$$



$$= 10\,416,667 \left(1 - \frac{69}{360} \cdot 0,12\right) = \underline{\underline{10\,174,083}}$$

dithmTORANN