

$$1) M = 2C \quad J = C \quad n^? \quad u: 12\% \text{ a.a.} = 1\% \text{ a.m.}$$

$$C = C \cdot 0,02 \cdot t$$

$$\frac{C}{C} = 0,02 \cdot t$$

$$1 = 0,02t$$

$$t = \frac{1}{0,02} \rightarrow t = 50 = \underline{\text{4 anos e 2 meses}}$$

$$2) u: 15\% \text{ a.a.} \quad n: 8 \text{ m} = \frac{2}{3} \text{ a.} \quad J: 1920$$

$$J = C \cdot u \cdot n$$

$$1920 = C \cdot 0,15 \cdot \frac{2}{3}$$

$$1920 = C \cdot 0,05 \cdot 2$$

$$1920 = 0,1C$$

$$C = \frac{1920}{0,1} \rightarrow C = \underline{19.200,00}$$

$$3) n = 12 \quad \text{PMT} = 360 \quad u: 3\% \text{ a.m.} \quad \text{VP?}$$

$$f[CIX] + g[BEG] \rightarrow 12n \rightarrow 350 \text{ CHS PMT} \rightarrow 3i$$

$$\text{VP} = \underline{3588,42}$$

$$4) u: 1,5\% \text{ a.m.} \quad n: 3 \text{ a.} = 36 \text{ m} \quad C = 6200$$

$$J? \quad M?$$

$$M = C(1+u)^n$$

$$M = 6200(1+0,015)^{36}$$

$$M = 6200(1,015)^{36}$$

$$M = 6200(1,70914)$$

$$M = \underline{10.596,70}$$

$$J = M - C$$

$$J = 10.596,70 - 6200$$

$$J = \underline{4396,70}$$

$$5) \text{VF} = 15.000 \quad n: 6 \text{ m} \quad u: 5\% \text{ a.m.}$$

$$D = 15000 \cdot 0,05 \cdot 6 \quad \text{VL} = 15000 - 4500$$

$$D = \underline{4500,00} \quad \text{VL} = \underline{10.500,00}$$

$$6) \text{VF} = 1000 \quad n: 3 \text{ m} \quad u: 5\% \text{ a.m.}$$

$$D = 1000 \cdot 0,05 \cdot 3 \quad \text{VL} = 1000 - 150$$

$$D = \underline{150,00} \quad \text{VL} = \underline{850,00}$$

$$7) \text{D.a.} = \frac{2,5\%}{30} = 0,08\% \text{ a.d.}$$

$$\text{And } \hat{u} = (1+0,0008)^{30} - 1$$

$$\hat{u} = (1,0024)^{30} - 1$$

$$\hat{u} = 1,3449 - 1$$

$$\hat{u} = \frac{0,3449}{100}$$

$$\hat{u} = \underline{34,49\%}$$

$$8) \text{PV} = 10000 \quad n: 15 \quad u: 2\% \text{ a.m.} \quad \text{PMT?}$$

$$10000 \text{ CHS PV} \rightarrow 15n \rightarrow 2i$$

$$\text{PMT} = \underline{778,25}$$

$$9) \text{PV} = 875 \quad n: 3 \quad \text{PMT} = 300 \quad u?$$

$$\text{Postecipadas: } 875 \text{ CHS PV}$$

$$300 \text{ PMT}$$

$$3n$$

$$\text{Antecipadas: } f[CIX]$$

$$g[BEG]$$

$$875 \text{ CHS PV}$$

$$300 \text{ PMT}$$

$$3n$$

$$u = \underline{1,42\%}$$

$$u = \underline{2,88\%}$$

$$10) \text{VN} = 8800 \quad n: 2 \quad u: 5\% \text{ a.m.} \quad D?$$

$$D = 8800 \cdot 0,05 \cdot 2$$

$$D = \underline{880,00}$$

$$11) C = 2000 \quad n: 7 \text{ m} \quad M = 2492,62 \quad u?$$

$$2492,62 = 2000 \cdot (1+u)^7$$

$$\frac{2492,62}{2000} = (1+u)^7$$

$$1,24631 = (1+u)^7$$

$$1,03196 = 1+u$$

$$u = \frac{0,03196}{100} \rightarrow u = \underline{3,2\%}$$