Resolució: exercici 3

	base 100 = 2007T1	base 100 = 2010T2	base 100 = 2012T4
2007T1			167,95
2007T2		(2)?	173,011
2007T3			172,071
2007T4			167,851
2008T1			165,913
2008T2			163,991
2008T3			157,834
2008T4		108,045	
2009T1	(1)?	102,682	
2009T2		102,023	
2009T3		100,544	
2009T4		100,454	
2010T1		98,969	
2010T2	83,012		
2010T3	81,562		
2010T4	81,094		
2011T1	77,671		
2011T2	76,2		
2011T3	73,13	(3)?	(4)?
2011T4	69,491		
2012T1	66,066		
2012T2	63,598		
2012T3	60,398		
2012T4	59,541		

Propietats bàsiques (base 1)

$$I_x^x = 1$$

$$I_a^b = \frac{1}{I_b^a}$$

$$I_b^a = I_b^c \cdot I_c^a$$

Càlcul interrogants (treballem amb base 1)

(1) $I_{2007T1}^{2009T1} = I_{2007T1}^{2010T2} \cdot I_{2010T2}^{2009T1} = 0,83012 * 1,02682 = 0,8524 \rightarrow 85,24$

(2) $I_{2010T2}^{2007T2} = I_{2010T2}^{2012T4} \cdot I_{2012T4}^{2007T2} = I_{2010T2}^{2007T1} \cdot I_{2007T1}^{2012T4} \cdot I_{2012T4}^{2007T2} = 1/I_{2007T1}^{2010T2} \cdot I_{2007T1}^{2012T4} \cdot$

$I_{2012T4}^{2007T2} = \frac{1}{0,83012} \cdot 0,59541 \cdot 1,73011 = 1,2409 \rightarrow 124,09$

(3) $I_{2010T2}^{2011T3} = I_{2010T2}^{2007T1} \cdot I_{2007T1}^{2011T3} = \frac{1}{I_{2007T1}^{2010T2}} \cdot I_{2007T1}^{2011T3} = \frac{1}{0,83012} \cdot 0,7313 = 0,8810 \rightarrow 88,10$

(4) $I_{2012T4}^{2011T3} = I_{2012T4}^{2007T1} \cdot I_{2007T1}^{2011T3} = 1,6795 \cdot 0.7313 = 1,2282 \rightarrow 122,82$

Càlcul sèrie base 100 = 2009T3

$$I_{2009T3}^x = I_{2009T3}^{2010T2} \cdot I_{2010T2}^x = \frac{1}{I_{2010T2}^{2009T3}} \cdot I_{2010T2}^x$$

$$x = [2008T4, 2010T1]$$

$$I_{2009T3}^y = I_{2009T3}^{2007T1} \cdot I_{2007T1}^y = \frac{1}{I_{2007T1}^{2009T3}} \cdot I_{2010T2}^y = \frac{1}{I_{2012T4}^{2010T2} \cdot I_{2010T2}^{2009T3}} \cdot I_{2010T2}^y$$

$$y = [2010T2, 2012T4]$$

$$I_{2009T3}^z = I_{2009T3}^{2012T4} \cdot I_{2012T4}^z = \frac{1}{I_{2012T4}^{2009T3}} \cdot I_{2012T4}^z = \frac{1}{I_{2012T4}^{2010T2} I_{2010T2}^{2009T3}} \cdot I_{2012T4}^z$$
$$= \frac{1}{I_{2012T4}^{2007T1} I_{2007T1}^{2010T2} I_{2010T2}^{2009T3}} \cdot I_{2012T4}^z$$

$$z = [2007T1, 2008T3]$$