

Άσκηση 2η

1/3

$$m_{\Omega} = \sqrt{m_1^2 \cos^2 \Omega + m_2^2 \sin^2 \Omega}$$

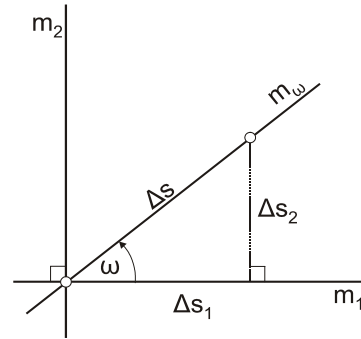
$$\varepsilon = \Omega - \omega$$

$$\tan \omega = \frac{m_2}{m_1} \tan \Omega,$$

$$\frac{m_1 - m_2}{m_1 + m_2} = \frac{\sin(\Omega - \omega)}{\sin(\Omega + \omega)}$$

$$m_1 = 1/\cos \varphi$$

$$m_2 = \cos \varphi$$

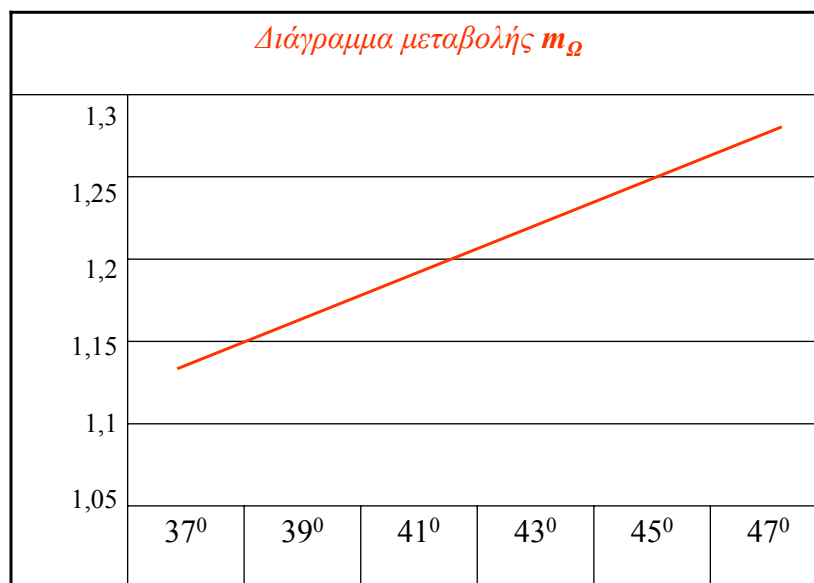


$$\Omega = 10^\circ + \left[\frac{O+E}{50^\circ} \right] 70^\circ$$

$$\varphi_A = 37^\circ - \varphi_B = 47^\circ$$

2/3

φ	m_1	m_2	Ω (rad)	m_{Ω}
37°	1,2521357	0,798636	0,589921	1,131386
39°	1,2867596	0,777146	0,589921	1,153368
41°	1,325013	0,75471	0,589921	1,178394
43°	1,3673275	0,731354	0,589921	1,206872
45°	1,4142136	0,707107	0,589921	1,239275
47°	1,4662792	0,681998	0,589921	1,276155



φ	$\tan\omega$	ω	ε (rad)	ε^0
37°	0,426982	0,403549	0,186373	10,67837
39°	0,404313	0,384219	0,205702	11,78587
41°	0,381305	0,364287	0,225634	12,9279
43°	0,35807	0,343846	0,246076	14,09909
45°	0,334721	0,322999	0,266923	15,29353
47°	0,311372	0,301857	0,288065	16,50488

