###### Quiz #2

Ευρύκλεια Κεσίσογλου 978 Τμήμα Α

1. C.
2. C. α=1 και β=5 αρα γ=3 απο γ = (α + β )/2. f(5)\*f(3)> 0 άρα γ= (1+3)/2 = 2.
3. D. |Φ(x)− Φ(y)| ≤ L |x – y| με Φ(Xn)= Xn+1.
4. C. Μεθοδος διχοτόμησης
5. C. Χn+1 = Xn – f(Xn) / f’(Xn) με f(Xn) = Χn^2 – R = 0, f’(Xn) = 2Χn

7. Β. f’(3) = tan(57ο) = 1,5398 … Χ1= X0 – f(X0) / f’(X0) => Χ1 = 3 – 5/1,5398 = - 0,2470

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| 4 |

10. Α

1. Α. Xn+1 = Xn – f(Xn)/(f(Xn) – f(Xn-1)/Xn – Xn-1).

Xi+1= 4 – 12/(12-5/4-3) = 4 – 12/7 = 2,2857 με Χi = 4 και Χi-1 = 3

1. Β. f’(3) = tan(57ο) = 1,5398 , Xn+1 = Xn – f(Xn)/(f(Xn) –

f(Xn-1)/Xn – Xn-1) = Xn -f(3) / f’(3) = 3 – 5/ 1.5398 = –0.24704.

1. Β