

Section 6 Lecture 36 – Euler's totient function

Exercises

Q1) Find the Euler totient function $\varphi(n)$ of the following numbers n :

- (i) 8 (ii) 10 (iii) 15 (iv) 23

Q2) Use the formula $\varphi(pq) = (p-1)(q-1)$ to give the Euler totient function $\varphi(n)$ for the following numbers n :

- (i) 10 (ii) 15 (iii) 35 (iv) 143

Q3) What do you notice about your solutions for Q1 and Q2 in terms of them being odd or even? Do you think this is always the case?