

**Análise Matemática II**  
**SOLUÇÕES LISTA 2**

(1)

- (2) (a) conv  
(b) conv  
(c) conv  
(d) conv  
(e) conv  
(f) conv  
(g) div

- (3) (a) div  
(b) div  
(c) conv  
(d) conv  
(e) div  
(f) conv  
(g) div  
(h) conv  
(i) conv  
(j) conv  
(k) conv  
(l) div  
(m) conv  
(n) conv

- (4) (a)  $\sum_{n=1}^8 \frac{(-1)^n}{(n+1)^2}$   
(b)  $\frac{1}{25}$

- (5) (a) simp conv  
(b) div  
(c) abs conv

- (6) (a) abs conv ( $\alpha > 1$ ), simp conv ( $0 < \alpha \leq 1$ ), div (o.c.)  
(b) abs conv ( $\alpha \in ]\frac{\pi}{2}, \frac{3\pi}{2}[$ ), div (o.c.)

(7)