5i. $\left(1+\frac{3}{(n+5)}\right)^{n-4}$ = ⊗($) → $\frac{n}{3}$ → $ = O(n)

$\left(\frac{n+5}{n+5}+\frac{3}{n+5}\right)^{n-4}$

$\left(\frac{n+8}{n+5}\right)^{n-4}$

$\left(\frac{n}{n}\right)^{n-4}$

1^{n-4}

5ii. $.01\log((2n)!)$ → ⊗($) → $ = $O(\log(n))$

5iii. $\log(2.8\, n(-3+\log(n))$ → ⊗($) → $ = $O(\log(\log(n))$

5iv. $3^{\log_2 n} + 4n^{1.6}$ → ⊗($) $ = O $ = n^2

5v. $-n^3 + \log(1/n) + \log(\log(n))$ does not converge

↑ $-\infty$