Macro Module 3 Cobb-Douglas Production Function basic practice exam questions

(The attached PDF file has better formatting.)

Question 3.1: Cobb-Douglas production function

An economy has a Cobb-Douglas production function: $Y = AK^{\alpha} L^{(1-\alpha)}$, with $\alpha = 81\%$.

If labor increases 3.27%, capital increases 5.40%, and the technology level increases 4.23%, what is the increase in real GDP?

Answer 3.1: 3.27% × (1 − 81%) + 5.40% × 81% + 4.23% = 9.23%