

06/01/21
12:00

Arturo Vitrus
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(Pg. 4)
Act 4.000

Question Three

$$b) ii) \int_1^2 3x e^{2x} dx$$

$$= 3 \cdot \int_1^2 x e^{2x} dx$$

$$= 3 \cdot \int_2^4 \frac{e^u}{4} du$$

$$= 3 \cdot \frac{1}{4} \cdot \int_2^4 e^u du$$

$$= 3 \cdot \frac{1}{4} \left[e^u - \int e^u du \right]_2^4$$

$$= 3 \cdot \frac{1}{4} \left[e^u - e^u \right]_2^4$$

$$= \frac{3}{4} \left[e^u - e^u \right]_2^4$$