

2007 Form B AB1

$$\text{A. Area of R} = \int_{0.44605703}^{1.55394} (e^{2x-x^2} - 2) dx = 0.514$$

B.

$$\begin{aligned} \text{Area of S} &= \int_0^2 (e^{2x-x^2} - 1) dx - \text{Area of A} \\ &= 2.060156939 - .5141427856 \\ &= 1.546 \end{aligned}$$

$$\text{C. } \int_{.44605703}^{1.55394} \left(\pi (e^{2x-x^2})^2 - \pi (1)^2 \right) dx$$