

× mse22s_l20_20220428

× mse22s_l21_20220503

× mse22s_l22_20220510

× 未命名的筆記本

× Thomas Calculus 13th [Solutions]



$$41. \int_0^4 \int_0^1 \int_{\sqrt{z}}^2 \frac{4 \cos(x^2)}{2\sqrt{z}} dx dy dz$$

$$= \int_0^4 \int_0^1 \int_0^{\sqrt{z}} \frac{4 \cos(x^2)}{2\sqrt{z}} dy dx dz = \int_0^4 \int_0^{\sqrt{z}} \frac{4 \cos(x^2)}{\sqrt{z}} dx dz$$

$$= \int_0^4 \left(\frac{\sin 4}{1} \right) z^{-\frac{1}{2}} dz = \left[(\sin 4) z^{\frac{1}{2}} \right]_0^4 = 2 \sin 4 \#$$