$$P\left(0 \le X \le \frac{1}{4},\ 0 \le Y \le \frac{1}{4}\right)$$

$$= \int_0^{\frac{1}{4}} \left(\int_0^{\frac{1}{4}} \frac{6}{5}(x + y^2)dx \right) dy$$

$$= \frac{6}{5} \int_0^{\frac{1}{4}} \left(\frac{X^2}{2} + xy^2 \right) \Big|_{x=0}^{x=\frac{1}{4}} dy$$