$$\int_{0}^{1} \frac{1}{(10)} \times^{2} + \frac{1}{30} dx$$

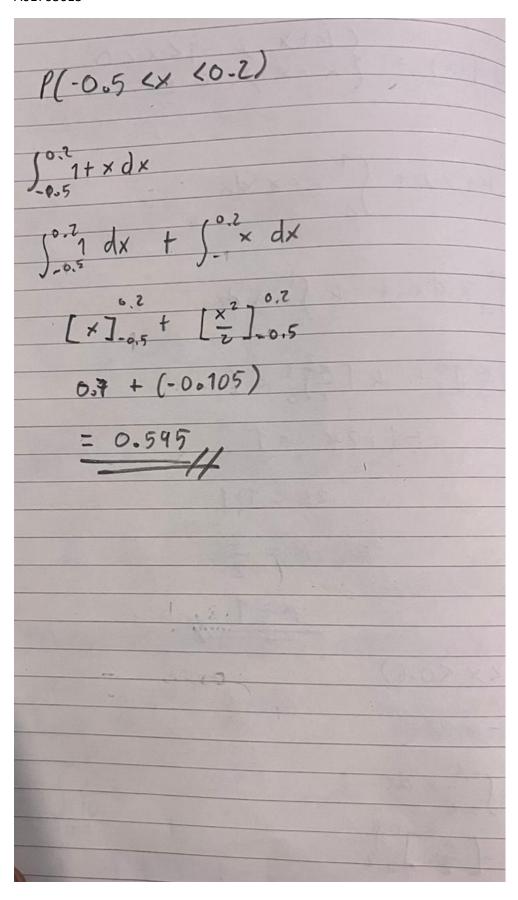
$$\int_{0}^{1} \frac{1}{10} \times^{2} dx + \int_{30}^{1} \frac{1}{30} dx$$

$$\int_{0}^{1} \frac{1}{10} \times^{2} dx + \int_{30}^{1} \frac{1}{30} dx$$

$$\int_{0}^{1} \frac{1}{10} \times^{2} dx + \int_{30}^{1} \frac{1}{30} dx$$

$$\int_{0}^{1} \frac{1}{3} + \frac{1}{30} = \frac{2}{30} = \frac{1}{10}$$

$$\int_{-0.5}^{0.2} \frac{1}{10} \times^{2} + \frac{1}{30} dx = \frac{1}{30} \times \frac{1}{30} \times \frac{1}{30} = \frac{1}{30} \times \frac{1}{30} \times$$



| A01703013 |
|--|
| |
| © $f(x) = \frac{3}{1000} x^2, x \in [0, K]$ |
| $\int_{0}^{1} \frac{3}{1000} \times^{2} dx = \left[\frac{3}{1000} - \frac{x^{3}}{3} \right]_{0}^{1}$ |
| = 3 · K ³ - 3 · 0 ³ |
| $\frac{3}{1000} \cdot \frac{k^3}{3} = 1$ $\frac{3}{1000} \cdot \frac{k^3}{3} = 1$ $\frac{3}{1000} \cdot \frac{1}{3} = 1$ |
| K = 1000 K = 10 H |
| $P(\times > 8.5) = 0$ $P(\times = 2)$ |
| |
| Jo 1000 x dx = 3 [x3] |
| 3 18.5 x2 dx 1000 L3 d - 00003 - 8 |
| $= \frac{3}{1000} \left[\frac{x^3}{3} \right]_0^{8.5} = 0.008$ |
| = 0.003 - 204.7 |
| = 0.6141 |
| |

| (d) f(x) = 2Ke - xx, 0 < x < 4 |
|--|
| 14 24e dx =1 |
| [-2E] = 1 |
| -4x -12e +2 -1 |
| $e^{-4\kappa} = \frac{1}{2}$ $-4\kappa = \ln(\frac{1}{2})$ |
| $K = -\ln\left(\frac{1}{2}\right)$ $K = \ln\left(\frac{1}{2}\right)$ $K = \ln\left(\frac{1}{2}\right)$ |
| ¥ ≈ 0.1733 |
| |

