Calculus 2 Workbook

Probability

krista king MATH

PROBABILITY DENSITY FUNCTIONS

■ 1. Given $f(x)$, find $P(0 \leq x \leq 2)$.

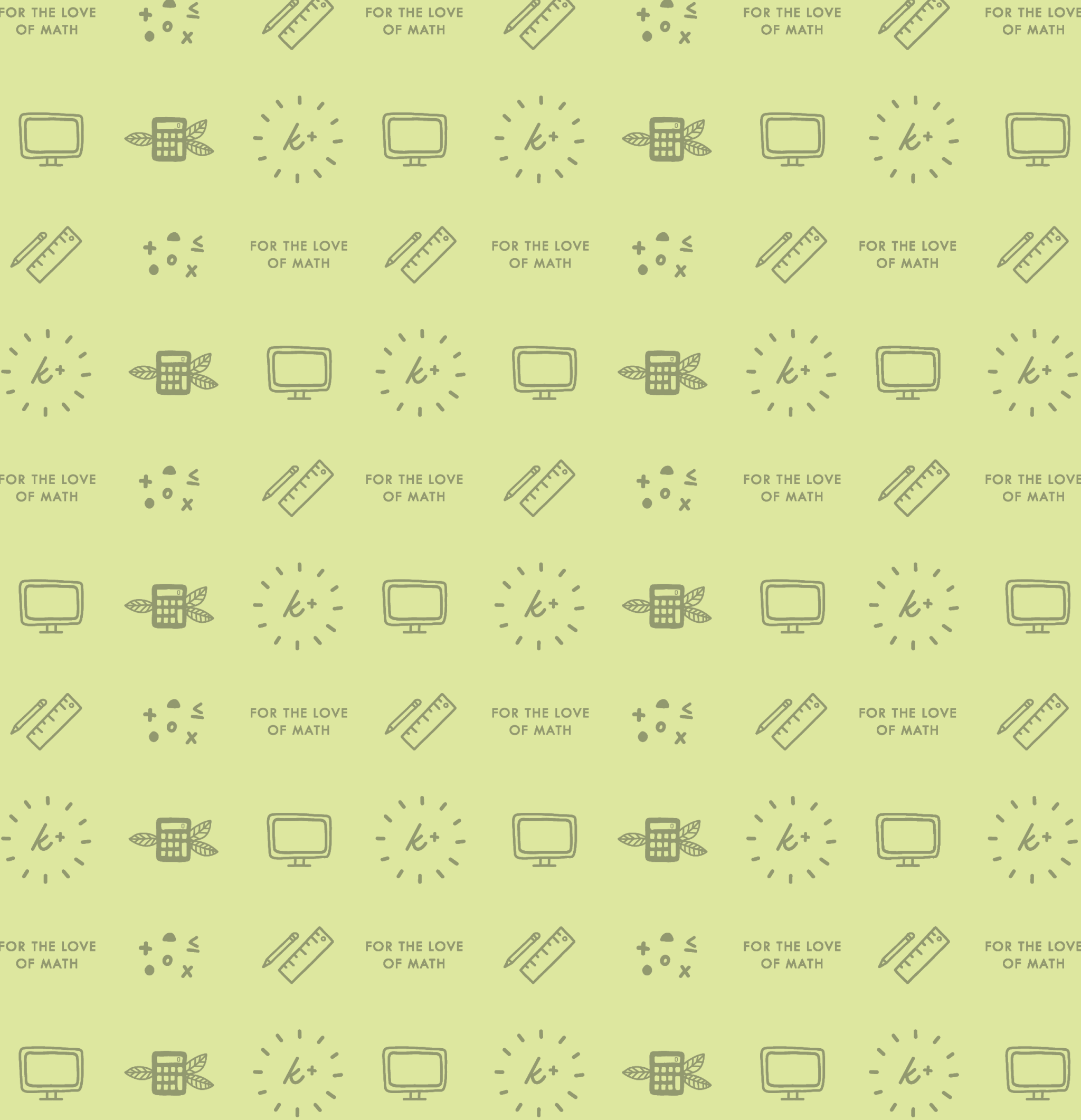
$$f(x) = \begin{cases} \frac{1}{32} & 0 \leq x \leq 32 \\ 0 & x < 0 \text{ or } x > 32 \end{cases}$$

■ 2. Given $g(x)$, find $P(1 \leq x \leq 5)$.

$$g(x) = \begin{cases} e^{-x} & x \geq 0 \\ 0 & x < 0 \end{cases}$$

■ 3. Given $h(x)$, find $P(-1 \leq x \leq 1)$.

$$h(x) = \begin{cases} \frac{1}{6} & -2 \leq x \leq 4 \\ 0 & x < -2 \text{ or } x > 4 \end{cases}$$


FOR THE LOVE OF MATH