The continuous rv $X$ has pdf $f(x)$ where
$f(x) = k,\ 1 \le x \le 5$

$k = \frac{1}{4}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = k,\ 0 \le x \le 5$

$k = \frac{1}{5}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = k,\ -2 \le x \le 1$

$k = \frac{1}{24}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = \begin{cases} k & 0 \le x \le 4 \\ 2k & 4 \le x \le 8 \end{cases}$

$k = \frac{1}{49}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = \begin{cases} kx & 0 \le x \le 7 \\ k(14-x) & 7 \le x \le 14 \end{cases}$

$k = \frac{1}{3}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = \begin{cases} k & 0 \le x \le 4 \\ 2k & 4 \le x \le 9 \end{cases}$

$k = \frac{1}{28}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = \begin{cases} k & 0 \le x \le 4 \\ 2k & 4 \le x \le 10 \\ k(x-10) & 10 \le x \le 14 \end{cases}$

$k = \frac{1}{40}$

$k = \frac{1}{6}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = \begin{cases} kx & 0 \le x \le 3 \\ k(6-x) & 3 \le x \le 6 \end{cases}$

$k = \frac{1}{32}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = kx,\ 0 \le x \le 3$

$k = 2$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = k,\ 3 \le x \le 5.5$

$k = \frac{1}{3}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = kx,\ 0 \le x \le 4$

$k = \frac{1}{8}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = kx,\ 2 \le x \le 6$

$k = \frac{2}{9}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = kx,\ 3 \le x \le 7$

$k = \frac{1}{16}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = kx,\ 1 \le x \le 5$

$k = \frac{1}{20}$

$k = \frac{1}{50}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = k(5-x),\ 0 \le x \le 6$

$k = \frac{1}{12}$

The continuous rv $X$ has pdf $f(x)$ where
$f(x) = k(10-x),\ 2 \le x \le 10$

$k = \frac{1}{18}$

$k = \frac{2}{25}$