**5.**

| $x$ | $(-\infty, -2]$ | $(-2, 3]$ | $(3, 5]$ | $(5, \infty)$ |
|---|---|---|---|---|
| $F(x)$ | $0$ | $0,2$ | $0,7$ | $1$ |

$p_i = f_i(x)$

$f(x)$ - funkcja gęstości

| $X_i$ | $-2$ | $3$ | $5$ |
|---|---|---|---|
| $p_i$ | $0,2$ | $0,5$ | $0,3$ |

Szukato? $F\left((-\infty, x_1]\right) = 0$

$F\left((x_n, \infty)\right) = 1$ $\quad$ zawsze

$F\left((x_1, x_2]\right) = F\left((-\infty, x_1]\right) + p_1 = 0 + p_1$

$F\left((x_k, x_{k+1}]\right) = F\left((x_{k-1}, x_k]\right) + p_{k+1}$

$\boxed{p_{k+1} = F\left((x_k, x_{k+1}]\right) - F\left((x_{k-1}, x_k]\right)}$

Stąd

$p_1 = F\left((x_1, x_2]\right) - 0 = 0,2$

$p_2 = F\left((x_2, x_3]\right) - 0,2 = 0,7 - 0,2 = 0,5$

$p_3 = F\left((5, +\infty)\right) - F\left((3, 5]\right) = 1 - 0,7 = 0,3$