

$x=10$  時のみ.  $0 \leq x \leq 15$

(1) より

$$P_{2n}(10) = \frac{1}{2} P_{2n-1}(20)$$

$x=20$  時のみ.

$16 \leq x \leq 20$

$$= \frac{1}{2} \cdot \left( \frac{1}{2} + \frac{1}{2} P_{2n-2}(2 \times 20 - 30) \right)$$

$$= \frac{1}{4} P_{2n-2}(10) + \frac{1}{4}$$

$$\therefore P_{2n}(10) = \frac{1}{4} P_{2n-2}(10) + \frac{1}{4}$$