

2. 

|     |     |       |     |
|-----|-----|-------|-----|
| $x$ | $0$ | $0,5$ | $1$ |
| $y$ | $2$ | $5$   | $4$ |

 Znaleźć fcję interpolującą

a)  $P(x) = a + b \cos \pi x + c \sin \pi x$

b)  $P_2(x) = ax^2 + bx + c$

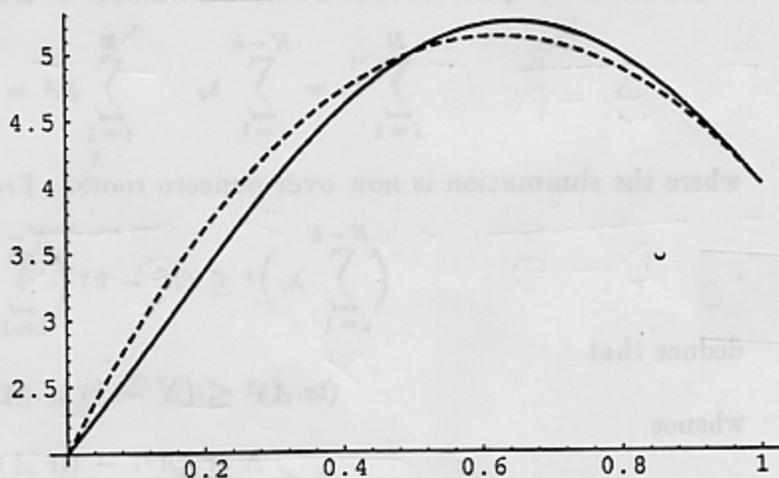
$$P(0) = a + b = 2 \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} a = 3 \\ b = -1 \\ c = 2 \end{array}$$

$$P(1/2) = a + c = 5$$

$$P(1) = a - b = 4$$

$$P(x) = 3 - \cos \pi x + 2 \sin \pi x$$

$$P_2(x) = -2(4x^2 - 5x - 1)$$



dash:  $P(x)$

solid line:  $p_2(x)$