

$$f(x) = x^3 + x^2 + x \quad \text{vergeben}$$

$$\begin{aligned} \text{II. } f(1) &= -17 & \text{III. } f(2) &= -4 & \text{IV. } f(-2) &= 4 \\ \text{I. } f(0) &= 8 \end{aligned}$$

$$f(x) = ax^3 + bx^2 + cx + d$$

$$\text{I. } f(0) = a \cdot 0^3 + b \cdot 0^2 + c \cdot 0 + d = 8$$

$$\text{II. } f(1) = a \cdot 1^3 + b \cdot 1^2 + c \cdot 1 + d = -17$$

$$\text{III. } f(2) = a \cdot 2^3 + b \cdot 2^2 + c \cdot 2 + d = -4$$

$$\text{IV. } f(-2) = a \cdot (-2)^3 + b \cdot (-2)^2 + c \cdot (-2) + d = 4$$

$$\text{I. } \quad \quad \quad d = 8$$

$$\text{II. } 1a + 1b + 1c + 1d = -17$$

$$\text{III. } 8a + 4b + 2c + 1d = -4$$

$$\text{IV. } -8a + 4b - 2c + 1d = 4$$

$$\text{II. } 1a + 1b + 1c + 8 = -17 \quad | -8$$

$$\text{I. } \quad \quad \quad d = -8$$

$$\text{II. } 1a + 1b + 1c = -25$$

III.

IV.

$$\begin{array}{ccc|c} & & & d = -8 \\ \hline 1 & 1 & 1 & -25 \end{array}$$