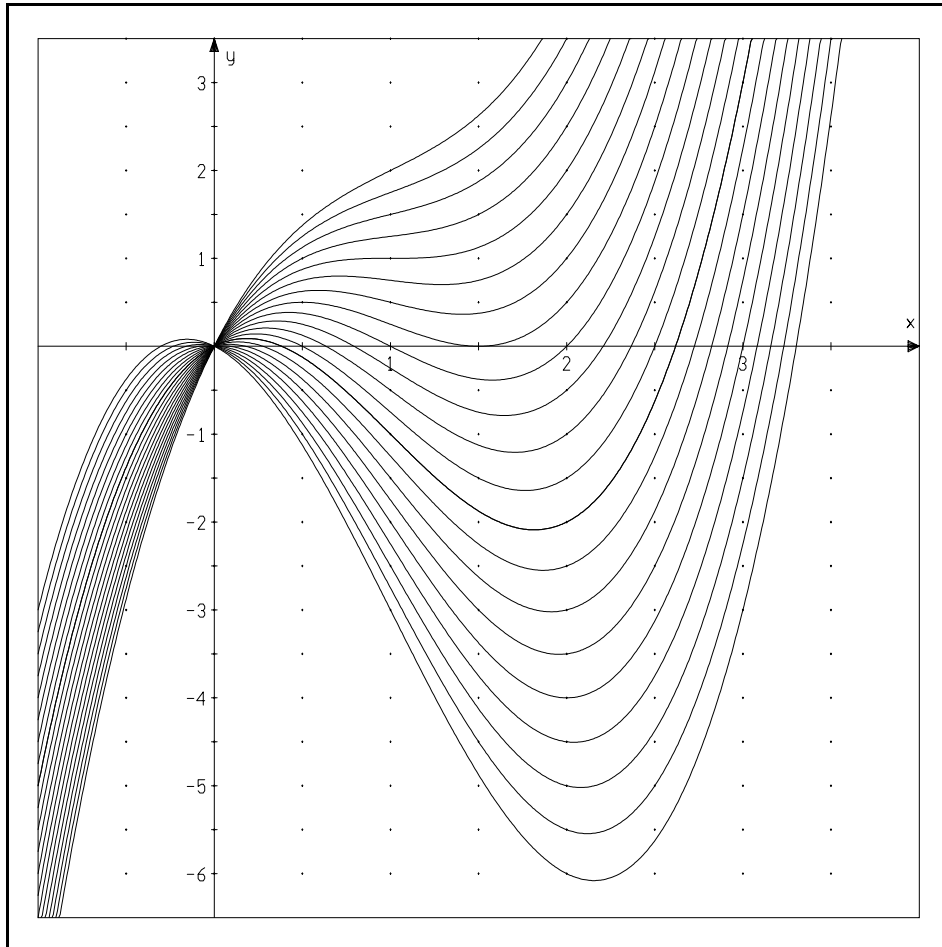
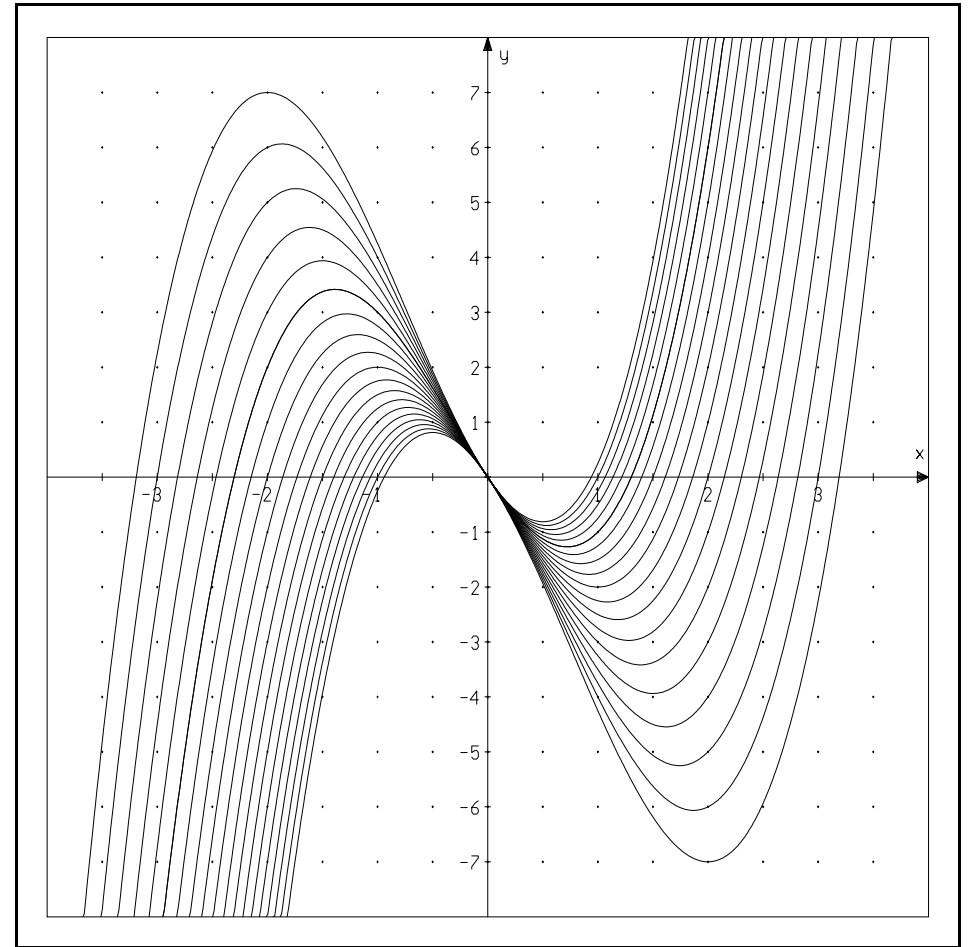


Funktionsscharen



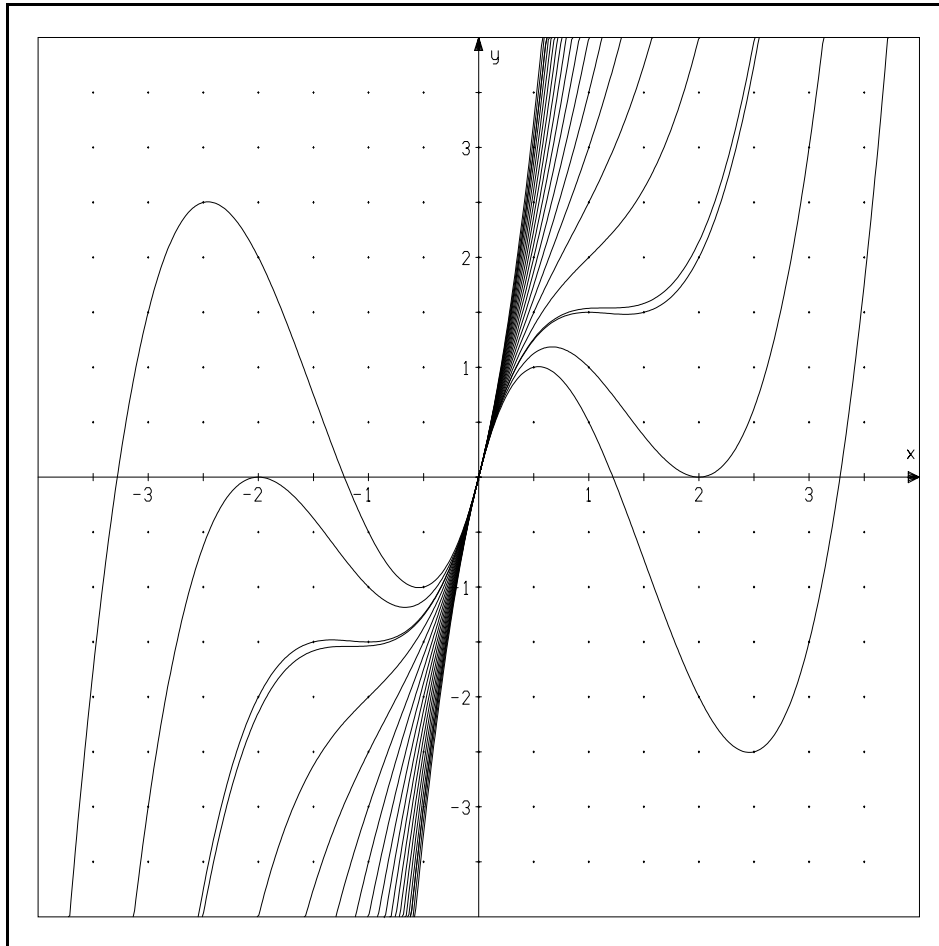
$$f_a(x) = x^3 - 3 \cdot x^2 + a \cdot x \quad \text{mit } a \in \left\{ -\frac{1}{2}, -\frac{1}{4}, 0, \dots, \frac{15}{4}, 4 \right\}$$



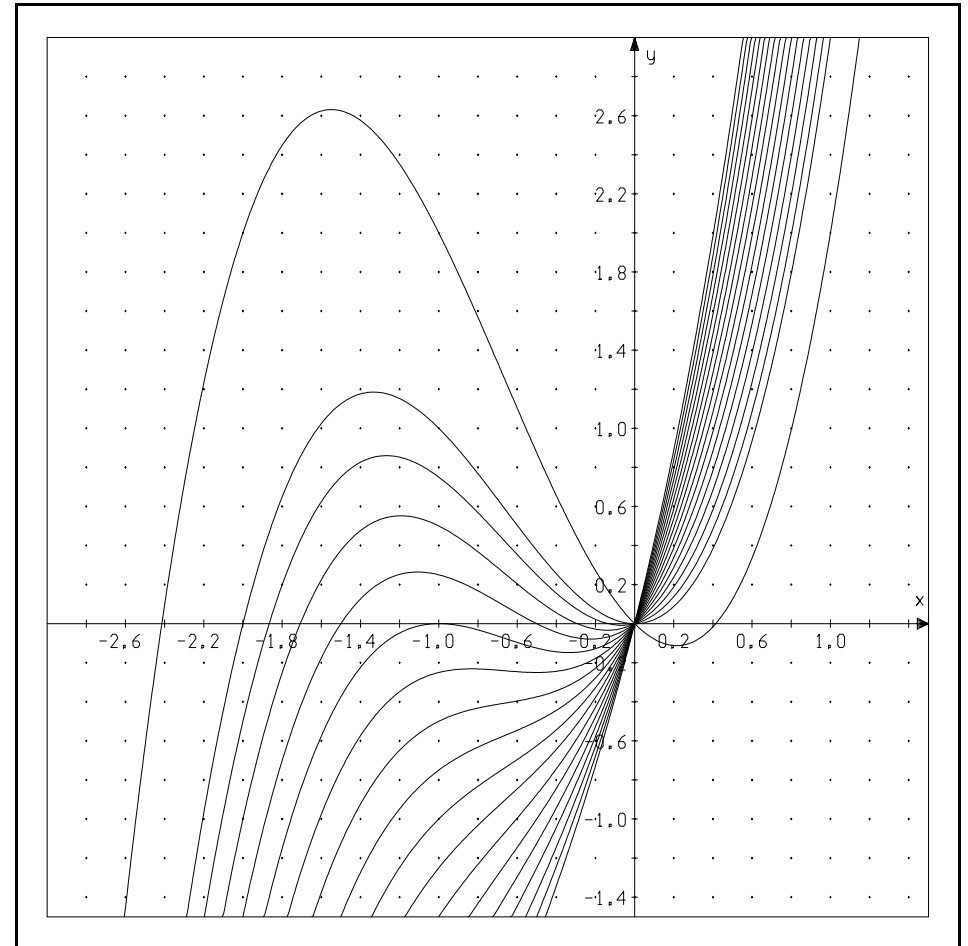
$$g_a(x) = x^3 + a \cdot x^2 - 3 \cdot x \quad \text{mit } a \in \left\{ -\frac{9}{4}, -\frac{8}{4}, -\frac{7}{4}, \dots, \frac{9}{4} \right\}$$

Welcher Graph gehört zu welchem Parameter?

Funktionsscharen



$$f_a(x) = x^3 - 2 \cdot a \cdot x^2 + 4 \cdot x \quad \text{mit } a \in \left\{ -\frac{9}{4}, -2, \dots, \frac{9}{4}, -\sqrt{3}, \sqrt{3} \right\}$$



$$g_a(x) = x^3 + 2 \cdot x^2 - a \cdot x \quad \text{mit } a \in \left\{ -3, -\frac{11}{4}, \dots, -\frac{1}{4}, 0 \right\}$$

Welcher Graph gehört zu welchem Parameter?
