

**Problem statement** a) Graph  $f(x) = x^3 - x$  in the interval  $-1 \leq x \leq 2$ . Compute  $\int_{-1}^2 f(x) dx$ .

b) Graph  $g(x) = |x^3 - x|$  in the interval  $-1 \leq x \leq 2$ . Compute  $\int_{-1}^2 g(x) dx$ .

b) Graph  $h(x) = x^3 - |x|$  in the interval  $-1 \leq x \leq 2$ . Compute  $\int_{-1}^2 h(x) dx$ .