

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

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

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