

**Problem statement** To the right is a graph of  $y = A(x)$ .

a) Find the domain and range of  $A$ .

b) If  $B$  is defined by  $B(x) = A(x) + 1$ , sketch the graph of  $B$  as well as you can. Find the domain and range of  $B$ .

c) If  $C$  is defined by  $C(x) = A(2x + 3)$ , sketch the graph of  $C$  as well as you can. Find the domain and range of  $C$ .

d) If  $D$  is defined by  $D(x) = \frac{1}{A(x)}$ , sketch the graph of  $D$  as well as you can. Find the domain and range of  $D$ .

