

part

$$3) \quad X :=]-1, 2[\cup \{3, 5\} \quad A_c(X) = [-1, 2]$$

$$Y :=]-\infty, -1[\cup \mathbb{R} \quad A_c(Y) =]-\infty, 1] \cup]-\infty, +\infty[$$

$$4) \quad f(x) = \cos x, \quad g(x) = 3 \quad h(x) = 2x + 1$$

$$\sup(f) = \pi/2 \quad \inf(f) = -\pi/2$$

$$\sup(g) = \inf(g) = 3$$

$$\sup(h) = +\infty, \quad \inf(h) = -\infty$$