EXERCICE 1

1)

a)
$$A(0; 0)$$

 $B(1; 0)$
 $C(1; 1)$
 $D(0; 1)$
 $E(0,5; \sqrt{3}/2)$
 $F((2+\sqrt{3})/2; 0,5)$

b)

2)
$$\alpha = 180 - 120 = 60^{\circ}$$

 $\beta = 90 - 60 = 30^{\circ}$
 $\theta = (180 - 30) / 2 = 75^{\circ}$
 $\mu = 90 + 60 = 150^{\circ}$
 $\widehat{EDC} = 90 - 75 = 15^{\circ}$
 $\widehat{FDC} = 90 - 75 = 15^{\circ}$

EXERCICE 2

1.

a)
$$cos(x) \ge 0$$

 $x \ge arccos(0)$
 $x \ge \pi/2$
b) $cos(x) \ge -1/2$

$$x \ge \arccos(-1/2)$$

 $x \ge -\pi/3$

$$X \geq -\pi/3$$

2.
$$\cos^2(x) + 1/2\cos(x) \ge 0$$