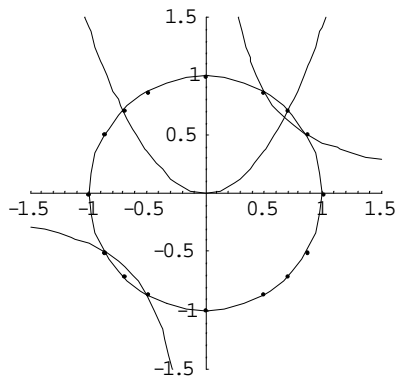


# Esercizi di trigonometria semi-svolti

Per ciascuna delle seguenti disequazioni individua nel piano CS le relative zone valide e le relative soluzioni per l'incognita  $x$

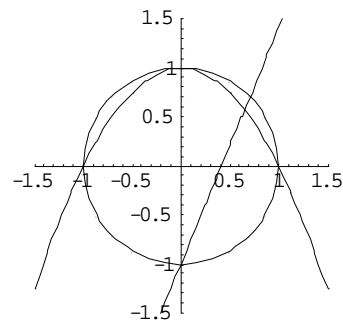
## Esercizio # 1

$$\frac{4 \cos(x) \sin(x) - \sqrt{3}}{\sin(x) - \sqrt{2} \cos^2(x)} \leq 0$$



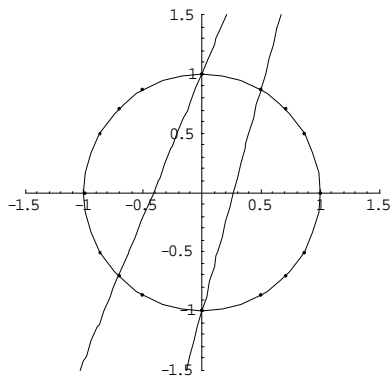
## Esercizio # 3

$$\frac{\cos^2(x) + \sin(x) - 1}{(-2 - \sqrt{2}) \cos(x) + \sqrt{2} \sin(x) + \sqrt{2}} < 0$$



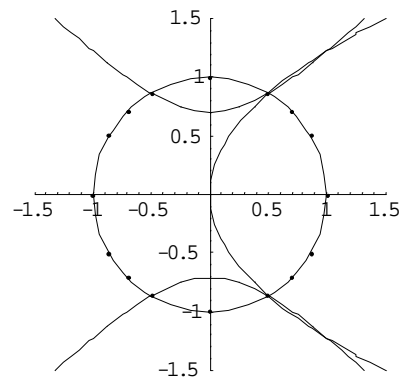
## Esercizio # 2

$$\frac{(-2 - \sqrt{3}) \cos(x) + \sin(x) + 1}{(2 + \sqrt{2}) \cos(x) - \sqrt{2} \sin(x) + \sqrt{2}} \geq 0$$



## Esercizio # 4

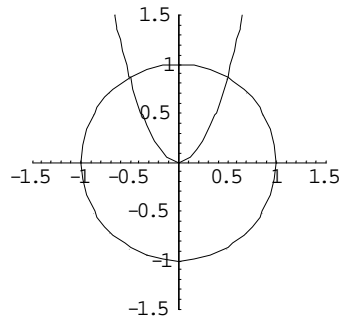
$$\frac{2 \cos^2(x) - 2 \sin^2(x) + 1}{3 \cos(x) - 2 \sin^2(x)} \leq 0$$



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**Esercizio # 5**

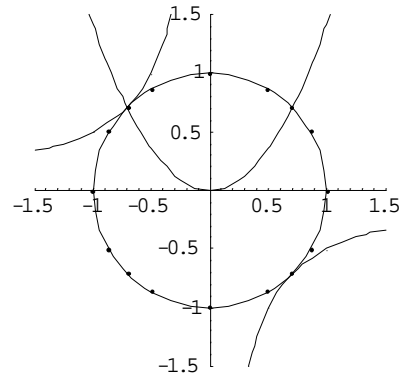
$$\csc(x) \sec(x) (\sin(x) - 2\sqrt{3} \cos^2(x)) \leq 0$$



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**Esercizio # 7**

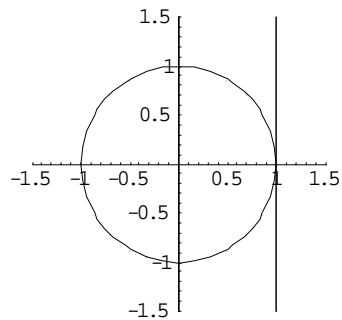
$$\frac{2 \cos(x) \sin(x) + 1}{\sin(x) - \sqrt{2} \cos^2(x)} < 0$$



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**Esercizio # 6**

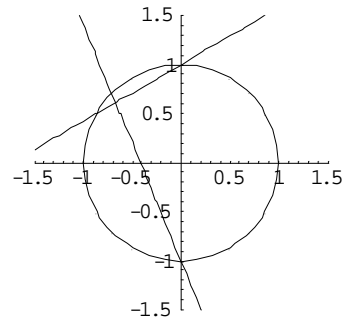
$$(1 - \cos(x)) \tan(x) < 0$$



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**Esercizio # 8**

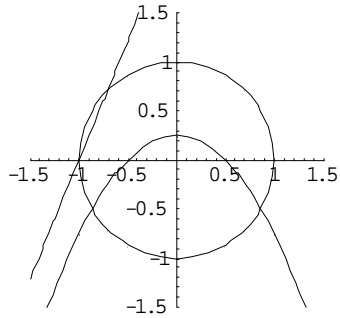
$$\frac{(-2 - \sqrt{2}) \cos(x) - \sqrt{2} \sin(x) - \sqrt{2}}{\cos(x) - \sqrt{3} \sin(x) + \sqrt{3}} < 0$$



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**Esercizio # 9**

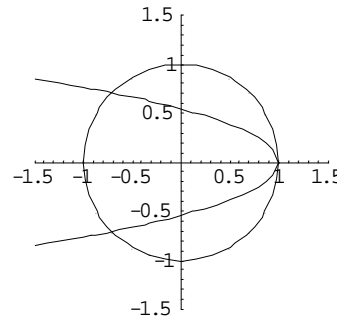
$$\frac{4\cos^2(x) + 4\sin(x) - 1}{\sqrt{2}\cos(x) + (-2 + \sqrt{2})\sin(x) + \sqrt{2}} > 0$$



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**Esercizio # 11**

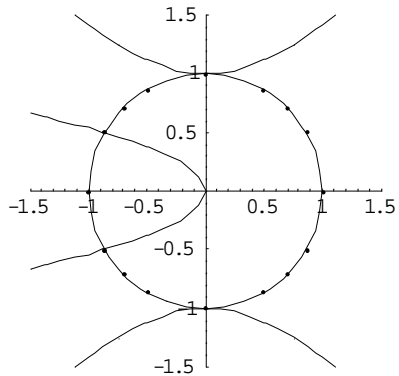
$$2\sin^2(x) + (2 - \sqrt{2})\cos(x) + \sqrt{2} - 2 < 0$$



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**Esercizio # 10**

$$\frac{\cos^2(x) - \sin^2(x) + 1}{2\sqrt{3}\sin^2(x) + \cos(x)} \leq 0$$



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**Esercizio # 12**

$$\sin(x) - 2\cos(x)\sin(x) > 0$$

