a) Show that the point $(-2,5)$ does not lie on the circle with equation $x^{2}+y^{2}=21$.
a) Show that the point $(-2,5)$ does not lie on the circle with equation $x^{2}+y^{2}=21$.
b) Determine whether the point $(-2,5)$ lies inside, outside or on the circle with equation $x^{2}+y^{2}=30$.
b) Determine whether the point $(-2,5)$ lies inside, outside or on the circle with equation $x^{2}+y^{2}=30$.
c) Find the points of intersection between the line $x=3$ and the circle $x^{2}+y^{2}=73$.
c) Find the points of intersection between the line $x=3$ and the circle $x^{2}+y^{2}=73$.

