Equation of a circle

Gold

A circle *C* with centre at $(2,3)$ passes through the point $(-2,4)$.

a Show that the circle *C* also passes through the point $(6,2)$.

The tangent to the circle *C* at the point $(6,2)$ meets the y-axis at the point *P*.

b Find coordinates of *P*.

Silver

Find the coordinates of the points where the circle $(x-1)^2+(y-3)^2=10$ meets the x-axis.

Bronze

Show that $x^2+y^2-6x+4y+4=0$ can be written in the form $(x-a)^2+(y-b)^2=r^2$.