7	$(x-2)^2+y^2=4$	M1
	Begins process to rearrange for y, e.g. $y^2=4-(x-2)^2$	M1
	$y=\pm\sqrt{4x-x^2}$ Since negative y's will yield a smaller $x+y$, $y=+(4x-x^2)^{\frac{1}{2}}$	M1
	Expression to be maximised is, $f(x,y)=x+y$	M1
	$f(x)=x+(4x-x^2)^{\frac{1}{2}}$	M1
	$f'(x)=1+\frac{1}{2}(4-2x)(4x-x^2)^{-\frac{1}{2}}$	M1
	$1+\frac{1}{2}(4-2x)(4x-x^2)^{-\frac{1}{2}}=0$	M1
	Begins process to solve, e.g. $0=(4x-x^2)^{\frac{1}{2}}+2-x$ $x-2=(4x-x^2)^{\frac{1}{2}}$	M1
	$x^2-4x+4=4x-x^2$ $2x^2-8x+4$	M1
	$x=\frac{-(-8)\pm\sqrt{(-8)^2-4(2\times4)}}{2\times2}=2\pm\sqrt{2}$	M1
	Only $2+\sqrt{2}$ is valid, since the negative result does not satisfy $x-2=(4x-x^2)^{\frac{1}{2}}$	M1 Must include reasoning for ruling out negative result
	Max $x+y=$ $(2+\sqrt{2})+\left(4(2+\sqrt{2})-(2+\sqrt{2})^2\right)^{\frac{1}{2}}=2+2\sqrt{2}$	B1 **[12]** **[12 marks]**