# Addition and Double Angle Formulae Starter

**Question 1**

Can you recall the addition formulae?

$\sin(A+B) =$

$\sin(A-B) =$

$\cos(A+B) =$

$\cos(A-B) =$

$\tan(A+B) =$

$\tan(A-B) =$

**Question 2**

a) Use the identity for $\sin(A+B)$ to express $\sin 2A$ in terms of $\sin A$ and $\cos A$.

b) Use the identity for $\cos(A+B)$ to express $\cos 2A$ in terms of $\sin A$ and $\cos A$.

c) Hence express $\cos 2A$ in terms of

i) $\cos A$

ii) $\sin A$

d) Use the identity for $\tan(A+B)$ to express $\tan 2A$ in terms of $\tan A$.