Assess your learning – Complex Numbers

Where is your learning at? **Be Honest!**	red	orange	green	Revised Wk 10	Revised for Jun
Can you answer the following questions?					
I can calculate integer powers of i. E.g. Evaluate i^{76}					
I can show complex numbers on an Argand Diagram. E.g. Show $3 - 5i$ on an Argand Diagram.					
I can add/subtract Complex Nos and multiply them by a real no. E.g. If $z_1 = 2 + 3i$ and $z_2 = -4 - 5i$, evaluate $2z_1 - 3z_2$					
I can multiply Complex Nos. E.g. Evaluate $(3 - 4i)(2 + 7i)$					
I can calculate the modulus of a complex no. E.g. Calculate $\|5 - 7i\|$.					
I can write down the conjugate of a complex number. E.g. If $z_2 = -4 - 5i$, write down $\overline{z_2}$.					
I can divide complex numbers. E.g. Evaluate $\frac{2-3i}{4+3i}$.					
I can describe the effect of transformations on a complex no. E.g. Describe the effect of multiplying $2 - 5i$ by i.					
I can solve quadratic equations with complex roots. E.g. Solve $z^2 - 6z + 10 = 0$.					
I can form a quadratic equation when given the roots. E.g. Form quad eqn with roots $2 + 3i$ and $2 - 3i$.					
I can use the Conjugate Root Thm to solve eqns. E.g. Verify that $-3 - 4i$ is a root of $f(z) = z^2 + 6z + 25$. Write down the other root.					
I can solve cubic equations with real coefficients. E.g. $f(z) = 2z^3 - 3z^2 + 18z + 10$. If $1 - 3i$ is a root of $f(z) = 0$, find the other two roots.					
I can solve cubic equations with complex coefficients. E.g. Solve the equation $iz^2 + (2 - 3i)z + (-5 + 5i) = 0$.					
I can write a complex no in polar form. E.g. Write $3 - 3i$ in polar form.					
I can multiply and divide complex numbers in polar form. E.g. Write in polar: $\left[5\left(\cos\frac{\pi}{3} + i\sin\frac{\pi}{3}\right)\right]\left[2\left(\cos\frac{\pi}{6} + i\sin\frac{\pi}{6}\right)\right]$					
I can use DeMoivre's Theorem to evaluate complex numbers with large powers. E.g. Evaluate $(2 + 2i)^8$					
I can use DeMoivre's Theorem to solve complex equations. E.g. Solve $z^3 = 1 + i$					
I can use DeMoivre's Theorem to prove trig identities. E.g. Prove $\sin^3\theta = \frac{1}{4}[3\sin\theta - \sin 3\theta]$					