**1C De Moivre’s Theorem**

1. Proof by Induction:

Negatives:

0:

1. Simplify:

$$\frac{\left(cos\left(\frac{9π}{17}\right)+isin\left(\frac{9π}{17}\right)\right)^{5}}{\left(cos\left(\frac{2π}{17}\right)-isin\left(\frac{2π}{17}\right)\right)^{3}}$$

1. Express $\left(1+i\sqrt{3}\right)^{7}$ in the form $x+iy$, where $x,y\in R$