

Sangam S. K. M College - Nadi

Year 13

Mathematics

Worksheet 5

Questions:

1. Complete the table given below:

	Complex Numbers	Real Part	Imaginary Part
a)	$-3 - \sqrt{-36}$		
b)	$\frac{15 + 3i}{3}$		
c)	$\frac{\sqrt{25} + \sqrt{-9}}{7}$		

2. Simplify:

a) $(18i + 16) - (-10 + 15i) - 4i$

b) $\left(\frac{3 - \sqrt{-16}}{2}\right) + \left(\frac{2 - 8i}{4}\right)$

c) $(-8 - \sqrt{-32}) + (3 + \sqrt{-8})$

3. State whether each statement given below is true or false

a) All real numbers are complex numbers.

b) $(3 + 4i) \cdot (3 - 4i) = 9 + 16$

c) If $1 - 2i$ is the solution of a quadratic equation with real coefficients then $-1 + 2i$ is also a solution.