

Name : _____

Real Part and Imaginary Part

Sheet 1

A) Complete the table.

| Q.No | Complex numbers | Real parts | Imaginary parts |
|------|----------------------------------|------------|-----------------|
| 1) | $\frac{12 + \sqrt{-16}}{4}$ | | |
| 2) | $4 + 7i - 8$ | | |
| 3) | $\frac{\sqrt{9} + \sqrt{-4}}{5}$ | | |
| 4) | $-2 - \sqrt{-25}$ | | |
| 5) | $\frac{15 - 13i}{3}$ | | |

B) Form the complex numbers with the given real parts and imaginary parts.

- | | | |
|--|---|--|
| 1) Real part = 5 Imaginary part = 3 _____ | 2) Real part = -13 Imaginary part = 6 _____ | 3) Real part = -8 Imaginary part = -4 _____ |
| 4) Real part = 16 Imaginary part = -19 _____ | 5) Real part = 10 Imaginary part = 7 _____ | 6) Real part = -4 Imaginary part = 1 _____ |
| 7) Real part = -12 Imaginary part = -2 _____ | 8) Real part = 9 Imaginary part = 11 _____ | 9) Real part = 17 Imaginary part = -14 _____ |

Name : _____

Answer key

Sheet 1

Real Part and Imaginary Part

A) Complete the table.

| Q.No | Complex numbers | Real parts | Imaginary parts |
|------|----------------------------------|---------------------------------|-----------------------------------|
| 1) | $\frac{12 + \sqrt{-16}}{4}$ | 3 | 1 |
| 2) | $4 + 7i - 8$ | -4 | 7 |
| 3) | $\frac{\sqrt{9} + \sqrt{-4}}{5}$ | $\frac{3}{5}$ | $\frac{2}{5}$ |
| 4) | $-2 - \sqrt{-25}$ | -2 | -5 |
| 5) | $\frac{15 - 13i}{3}$ | 5 | $-\frac{13}{3}$ |

B) Form the complex numbers with the given real parts and imaginary parts.

- 1) Real part = 5
Imaginary part = 3
- 2) Real part = -13
Imaginary part = 6
- 3) Real part = -8
Imaginary part = -4

$5 + 3i$

$-13 + 6i$

$-8 - 4i$

- 4) Real part = 16
Imaginary part = -19

$16 - 19i$

- 5) Real part = 10
Imaginary part = 7

$10 + 7i$

- 6) Real part = -4
Imaginary part = 1

$-4 + i$

- 7) Real part = -12
Imaginary part = -2

$-12 - 2i$

- 8) Real part = 9
Imaginary part = 11

$9 + 11i$

- 9) Real part = 17
Imaginary part = -14

$17 - 14i$