

Answer on Question #42432 – Math – Complex Analysis

$$\frac{5}{2}(\cos 150^\circ + i \sin 150^\circ) = \frac{5}{2}\left(-\frac{\sqrt{3}}{2} + i\frac{1}{2}\right) = -\frac{5}{2} \times \frac{\sqrt{3}}{2} + i\frac{5}{2} \times \frac{1}{2} = -\frac{5\sqrt{3}}{4} + i\frac{5}{4} = a + bi, \text{ here } a = -\frac{5\sqrt{3}}{4},$$

$$b = \frac{5}{4}.$$