Exercise 3

In each case, find all the roots in rectangular coordinates, exhibit them as vertices of certain regular polygons, and identify the principal root:

(a) \((-1)^{1/3}\);  
(b) \(8^{1/6}\).

Ans. (b) \(±\sqrt{2}, ±\frac{1 + \sqrt{3}i}{\sqrt{2}}, ±\frac{1 - \sqrt{3}i}{\sqrt{2}}\).