

$$a = -1.3888 + 2.7522i$$

$$b = -2.6339 - 8.5606i$$

iteration 3

$$x_3 = -0.3451 + 1.3180i$$

iteration 4

$$x_3 = -0.3453 + 1.3187i$$

iteration 5

$$x_3 = -0.3453 + 1.3187i$$

Since $\left| \frac{x_3^5 - x_2^4}{x_2^6} \right| < 5.1393 \times 10^{-4}$

we stop here, Thus an approximate pair of

Complex roots is $a_1 = -0.3453 + 1.3187i$

$$a_2 = -0.3453 - 1.3187i$$

Example $f(x) = x^3 - 7x^2 + 6x + 5$

All roots 5.8210, 1.6872, -0.5090

are real. Approximate the root 1.6872