

## Page 135 Example 29

### Finding complex roots of a polynomial

TI-84 Plus

$$a_4x^4 + \dots + a_1x + a_0 = 0$$

$$a_4 = 1$$

$$a_3 = -2$$

$$a_2 = 6$$

$$a_1 = -2$$

$$a_0 = 5$$

MAIN MODE CLR LOAD SOLVE

$$a_4x^4 + \dots + a_1x + a_0 = 0$$

$$x_1 = 1 + 2i$$

$$x_2 = 1 - 2i$$

$$x_3 = 1.2E-13 + i$$

$$x_4 = 1.2E-13 - i$$

MAIN MODE COEF STO

Casio fx-9860GII

$$a_0x^4 + a_1x^3 + \dots + a_4 = 0$$

$$\begin{array}{cccc} a_0 & a_1 & a_2 & a_3 \rightarrow \\ \hline 1 & -2 & 6 & -2 \end{array}$$

1

SOLVE DEL CLR EDIT

$$a_0x^4 + a_1x^3 + \dots + a_4 = 0$$

$$x_1 = 1 + 2i$$

$$x_2 = 1 - 2i$$

$$x_3 = i$$

$$x_4 = -i$$

1+2i

REPT