

Page 146 Finding roots of a polynomial using polynomial tools

TI-84 Plus

$$a_3x^3 + \dots + a_1x + a_0 = 0$$

$$a_3 = 1$$

$$a_2 = 2$$

$$a_1 = -5$$

$$a_0 = -6$$

MAIN MODE CLR LOAD SOLVE

$$a_3x^3 + \dots + a_1x + a_0 = 0$$

$$x_1 = -3$$

$$x_2 = 2$$

$$x_3 = -1$$

MAIN MODE COEF STO IF4→D1

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

$$a_4 = 6$$

$$a_3 = 17$$

$$a_2 = 10$$

$$a_1 = -7$$

$$a_0 = -6$$

MAIN MODE CLR LOAD SOLVE

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

$$x_1 = -1.5$$

$$x_2 = -1.0000000765$$

$$x_3 = -.99999992351$$

$$x_4 = .6666666667$$

MAIN MODE COEF STO

Casio fx-9860GII

$$aX^3 + bX^2 + cX + d = 0$$

$$\frac{a}{c} \quad \frac{b}{c} \quad \frac{c}{c} \quad \frac{d}{c}$$

$$1$$

$$2$$

$$-5$$

$$-6$$

$$-6$$

SOLVE DEL CLR EDIT

$$aX^3 + bX^2 + cX + d = 0$$

$$x_1 = -3$$

$$x_2 = -1$$

$$x_3 = -3$$

$$2$$

REPT

$$a_0X^4 + a_1X^3 + \dots + a_4 = 0$$

$$\frac{a_0}{a_4} \quad \frac{a_1}{a_4} \quad \frac{a_2}{a_4} \quad \frac{a_3}{a_4} \rightarrow$$

$$6$$

$$17$$

$$10$$

$$-7$$

$$6$$

SOLVE DEL CLR EDIT

$$a_0X^4 + a_1X^3 + \dots + a_4 = 0$$

$$x_1 = 0.6666666667$$

$$x_2 = -1$$

$$x_3 = -1.5$$

$$\times 2$$

$$\frac{2}{3}$$

REPT