

1. Use the given zeros to find the remaining zeros of the polynomial.

$$f(x) = x^4 + x^3 - 5x^2 - 3x + 6 = (x - 1)(x + 2)(x^2 - 3)$$

One of the zeros is:  $\sqrt{3}$

The remaining three zeros are:

2. Use the given zeros to find the remaining zeros of the polynomial.

$$f(x) = x^4 + 2x^3 - 7x^2 + 2x - 8$$

One of the zeros is:  $i$

The remaining three zeros are:

3. a) State the other root of the cubic that has these given roots:  $-5$  and  $\sqrt{2}$

b) Write the equation of this cubic in STANDARD FORM

4. a) State the other root of the cubic that has these given roots:  $3$  and  $8i$

b) Write the equation of this cubic in STANDARD FORM

5. a) State the other root of the cubic that has these given roots:  $1$  and  $2 - 7i$

b) Write the equation of this cubic in STANDARD FORM