

LESSON 76 Writing Polynomial Equations

Write a polynomial equation in standard form of least degree with leading coefficient 1 that has the given roots. Each root has multiplicity 1 unless otherwise stated.

1. $x = -2, x = 1, x = 4$

2. $x = 0, x = -2, x = 2, x = 3$

3. $x = 0, x = \sqrt{2}, x = -\sqrt{2}$

4. $x = 1, x = -1, x = i, x = -i$

5. $x = -2, x = 0$ (multiplicity 3)

6. $x = 4, x = 1$ (multiplicity 2)

7. $x = -2, x = 2, x = 1$ (multiplicity 2)

8. $x = \sqrt{2}, x = -\sqrt{2}, x = 1$ (multiplicity 3)