LESSON 80 Writing Polynomial Functions

Write a polynomial function in standard form of least degree with leading coefficient 1 that has the given zeros. Each zero has multiplicity 1 unless otherwise stated.

1. $x = -1\ x = -3, x = 3$

2. $x = 0, x = -1, x = 2, x = 3$

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

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

Write a polynomial function in standard form of least degree that has the given zeros and passes through the given point. Each zero has multiplicity 1 unless otherwise stated.

5. $x = -1, x = 2$
passes through $(0, -4)$

6. $x = -2, x = 1, x = 3$
passes through $(2, 12)$

7. $x = 0, x = 3, x = -1$ (multiplicity 2)
passes through $(-2, 10)$

8. $x = 2, x = -2, x = 0$ (multiplicity 3)
passes through $(1, -9)$