1. $P(x) = (x-1)(x+2)\left(x-\left(\frac{-1+\sqrt{5}}{2}\right)\right)\left(x-\left(\frac{-1-\sqrt{5}}{2}\right)\right)$, Zeros: $1,\ -2,\ \frac{-1\pm\sqrt{5}}{2}$

2. $P(x) = (x-2)(3x+1)\left(x-\left(\frac{-1+i\sqrt{7}}{2}\right)\right)\left(x-\left(\frac{-1-i\sqrt{7}}{2}\right)\right)$, Zeros: $2, -\frac{1}{3}, \frac{-1\pm i\sqrt{7}}{2}$

3. $P(x) = x^3 + x^2 + 4x + 4$

4. $P(x) = (x-1)(x+1)(x+2)(x+4)$, Zeros: $1, -1, -2, -4$

5. $P(x) = (x+1)(x-2)^2(2x-1)$, Zeros: -1, 2 (multiplicity 2), $\frac{1}{2}$

6. $P(x) = (x+1)^2(x-2)(x-2-\sqrt{2})(x-2+\sqrt{2})$, Zeros: -1 (multiplicity 2), 2, $2\pm\sqrt{2}$

7. $P(x) = (x+1)(2x+1)\left(x+3-\sqrt{10}\right)\left(x+3+\sqrt{10}\right)$, Zeros: $-1, -\frac{1}{2}, -3\pm\sqrt{10}$

8. $P(x) = (x-2)\left(x-\frac{1+i\sqrt{3}}{2}\right)\left(x-\frac{1-i\sqrt{3}}{2}\right)$, Zeros: $2, \frac{1\pm i\sqrt{3}}{2}$

9. $P(x) = (x-2)\left(x+1-i\sqrt{2}\right)\left(x+1+i\sqrt{2}\right)$, Zeros: $2, -1\pm i\sqrt{2}$

10. $P(x) = (2x+1)^2(x-i)(x+i)$, Zeros: $-\frac{1}{2}$ (multiplicity 2), $\pm i$

11. $P(x) = (2x-1)^2(x-2-i)(x-2+i)$, Zeros: $\frac{1}{2}$ (multiplicity 2), $2\pm i$

12. $P(x) = x^3 + x^2 - 4x + 6$

13. $P(x) = x^4 - 4x^3 + 10x^2 - 12x + 5$