

SM3H 1.8 ODD answers

1. $f(x) = (x - 2)(x - 3)(x - i)(x + i)$; x -intercepts = (2,0) (3,0); degree = 4

3. $f(x) = (x - \sqrt{3})(x + \sqrt{3})(x - 5 - 6i)(x - 5 + 6i)(x + 4)$; x -intercepts = (-4,0) ($\pm\sqrt{3}$, 0); degree = 5

5. $f(x) = x^3 - 4x^2 + 29x$; x -intercept = (0,0); degree = 3

7. $f(x) = -2(x - 2i)(x + 2i)(x + 6)^3$; x -intercept = (-6,0); degree = 5

9. $f(x) = -x^4 + 6x^3 - 9x^2$; x -intercept = (0,0), (3,0); degree = 4

11. b

13. d

15. $f(x) = (x - i)(x + i)(x - 3)(x + 2)$

17. $f(x) = (x - 3 - 2i)(x - 3 + 2i)(x - \sqrt{2})(x + \sqrt{2})$

19. $f(x) = -(2x - 3)(x + \sqrt{2})(x - \sqrt{2})$

21. $f(x) = (x - 3)(x + 1)(x^2 + 4)$

