

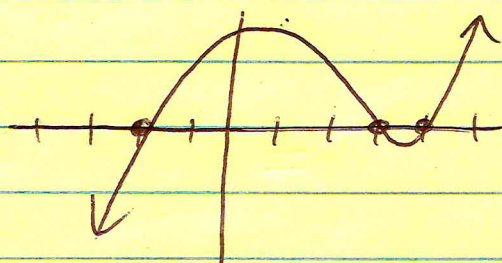
AL62

Ch6

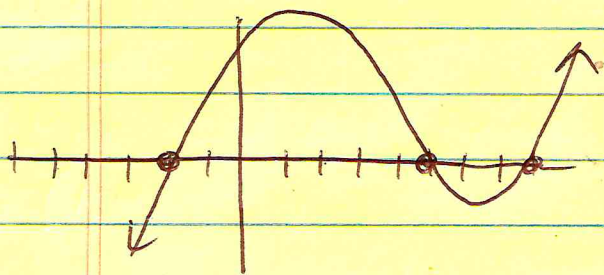
Review 6.1-6.3 II

① $6x^3 - 9x^2 + 3x + 3$ ② $-3x^3 + 3x^2 - 5x + 7$ } all are
 ③ $5x^3 - 29x^2 - 14x + 48$ ④ $5x^3 + 14x^2 - 143x + 28$ } polynomials

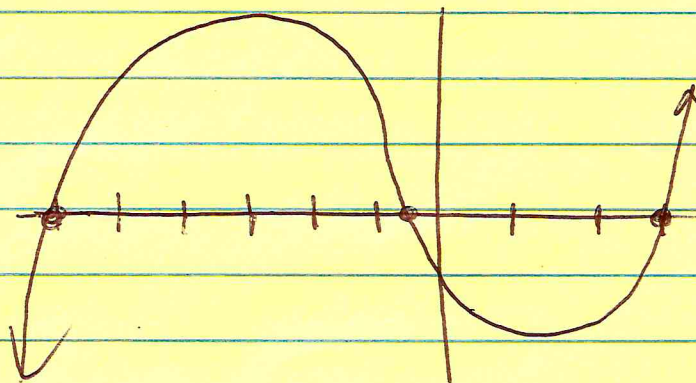
⑤ $R = -4$ ⑥ $R = 128$ ⑦ $f(x) = (x+2)(x-3)(x-4)$
 zeros: $x = -2, x = 3, x = 4$
 EB: $f(x) = |x^3| \curvearrowright \uparrow$



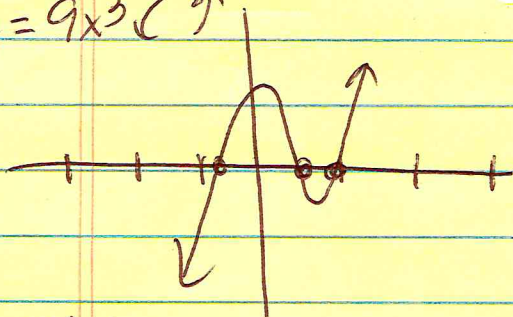
⑧ $f(x) = (x-8)(x+2)(x-5)$
 zeros: $x = 8, x = -2, x = 5$
 EB $f(x) = |x^3| \curvearrowright \uparrow$



⑩ $f(x) = (x+6)(x-3)(2x+1)$
 zeros: $x = -6, x = 3, x = -\frac{1}{2}$



⑨ $f(x) = (x-1)(3x-2)(3x+2)$
 zeros: $x = 1, x = \frac{2}{3}, x = -\frac{2}{3}$
 EB $y = 9x^3 \curvearrowright \uparrow$



Please Note:

① After you $\div$ by $x+2$, you get $x^2 - 7x + 12$, which factors into $(x-3)(x-4)$
 ⑧ " " " " $x-8$, " " $x^2 - 3x - 10$, " " " $(x-5)(x+2)$
 ⑨ " " " " $x-1$, " " $9x^2 - 4$, " " " $(3x-2)(3x+2)$
 ⑩ " " " " $x+6$, " " $2x^2 - 5x - 3$, " " " $(2x+1)(x-3)$