

Ch6

Test Review 6.1-6.3

1. a) $V(x) = x(x-1)(x+3)$

window used

b) $x=3$; length = 3m, width = 2m, height = 6m $[-10, 10]$ by $[-10, 50]$

2. relative max: $y = 84.07$
relative min: $y = -27.03$
 $[-10, 10]$ by $[-50, 100]$

3. $5x^2 - 4x - 20 + \frac{48}{x+2}$

4a) $p(3) = 0$ Yes, $x-3$ is a factor

5. $x^3 - 2x^2 + 3$

b) $p(5) = 100$ No, $x-5$ is not a factor

a) cubic b) 1

c) $p(-5/2) = 275/2$, $2x+5$ is not a factor

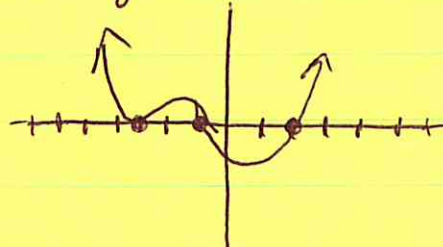
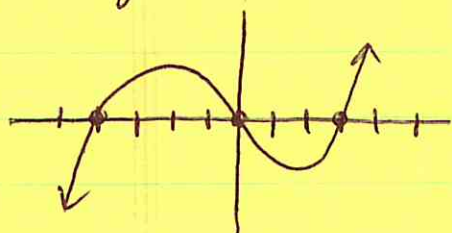
c) $y = 1x^3$ tells EB is $\nwarrow \nearrow$

6a) $x=0, x=3, x=-4$ multiplicity 3

b) $x=2, x=-3$ multiplicity 2, $x=-1$ multiplicity 3

EB $y = 1x^5 \nwarrow \nearrow$

EB $y = 1x^6 \nwarrow \nearrow$



7a) $y = x(x+6)(x-2)$

b) $y = 5x(2x-3)$

$x=0, x=-6, x=2$

$x=0, x=3/2$

EB $y = 1x^3 \nwarrow \nearrow$

EB $y = 10x^2 \nwarrow \nearrow$

