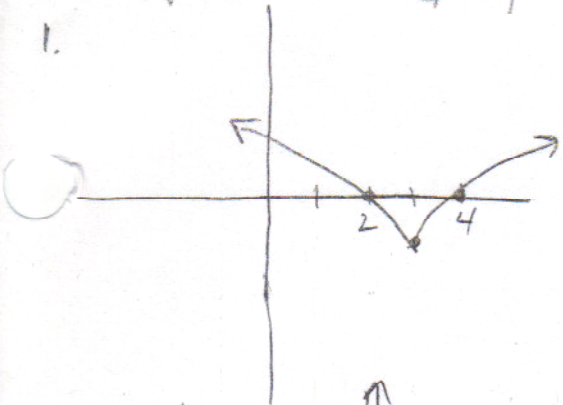
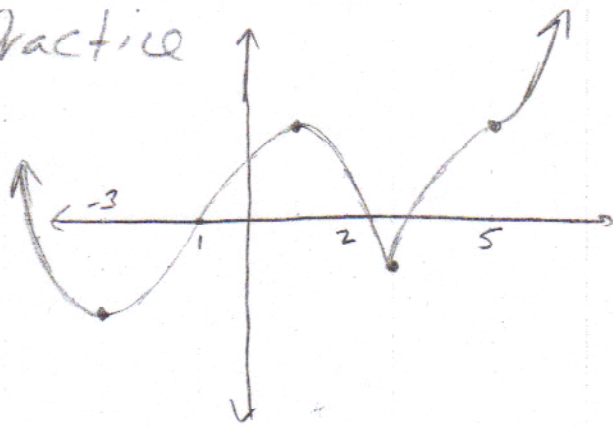


Answers Graphing Practice

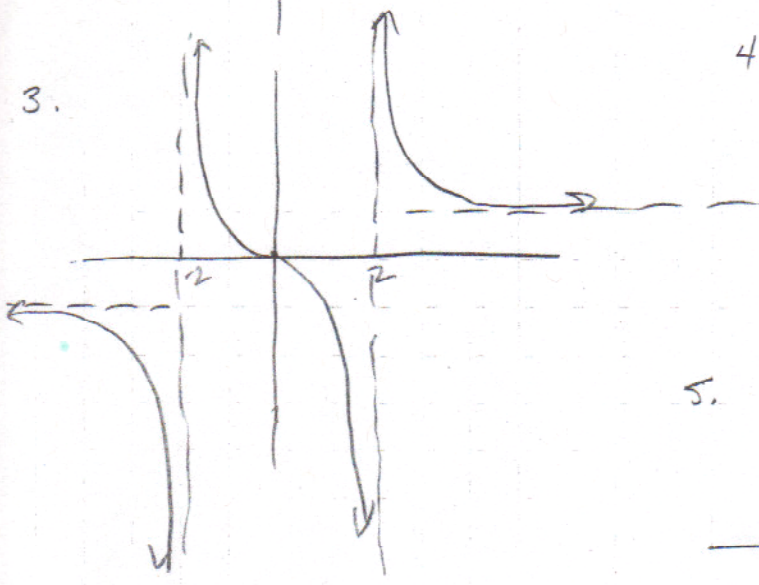
1.



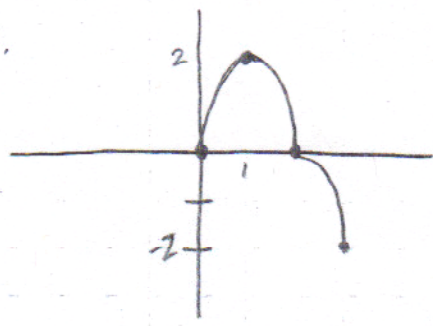
2.



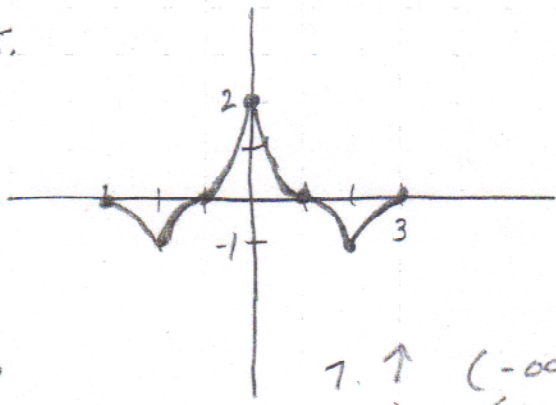
3.



4.



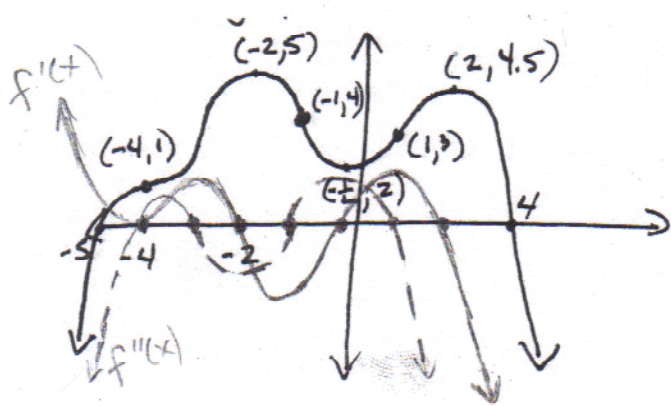
5.



6. \uparrow $(-3, -1) \cup (5, \infty)$ b/c $f' > 0$
 \downarrow $(-\infty, -3) \cup (-1, 5)$ b/c $f' < 0$
 max $(-1, f(-1))$ b/c f' ch + to -
 min $(-3, f(-3)) \cup (5, f(5))$ b/c f' ch - to +
 C'up $(-\infty, -2) \cup (2, \infty)$ b/c f' incr.
 C'down $(-2, 2)$ b/c f' decr
 poi $(-2, f(-2)) \cup (2, f(2))$ b/c f' extrema

7. \uparrow $(-\infty, 1) \cup (4, \infty)$ $f' > 0$
 \downarrow $(1, 4)$ $f' < 0$
 max $(1, f(1))$ f' ch + to -
 min $(4, f(4))$ f' ch - to +
 C'up $(-3, -1) \cup (2, \infty)$ $f' \uparrow$
 C'down $(-\infty, -3) \cup (-1, 2)$ $f' \downarrow$
 poi $(-3, f(-3))$ $(1, f(1))$ $(2, f(2))$
 f' extrema

8.



9. Concave up: $(-\infty, -3) \cup (1, \infty)$ $f'' > 0$
 Concave down: $(-3, 1)$ $f'' < 0$
 max: $(-2, f(-2))$ b/c $f'(-2) = 0 \wedge f''(-2) < 0$
 min $(4, f(4))$ b/c $f'(4) = 0 \wedge f''(4) > 0$
 * No extrema @ 1 (poi)

10 b) $f(-4) = 0$ $f'(-4) > 0$ incr. $f''(-4) < 0$ c'down
 $f''(-4) < f(-4) < f'(-4)$

10. a) $f(1) < 0$, $f'(1) = 0$, $f''(1) > 0$
 $f(1) < f'(1) < f''(1)$