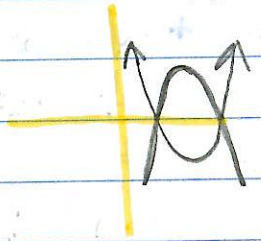
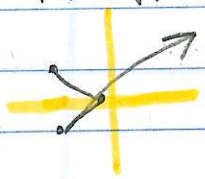
Function Absolutes

- $g(x)=|f(x)|$
- A conditional vertical reflection of the function.

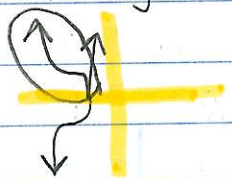


$f(x)=\sqrt{x}$ $|f(x)|$



- Identify the parts of $f(x)$ that are in Quadrant 3 & 4. Then reflect those pieces vertically over the x-axis.

$f(x)=x^3$ $g(x)=|x^3|$



Ex 2: $y=|3(x+2)^5-5|$

② Vs×3 ① HT:L2 ③ VT:D5

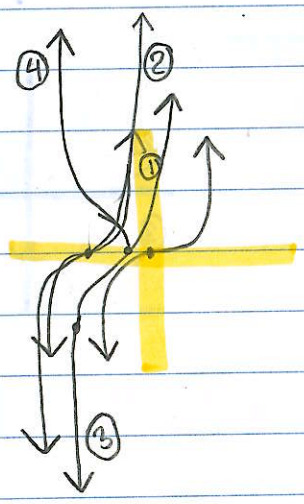
$0=3(x+2)^3-5$

$+5$ $/3$ $\sqrt[3]{}$ $+5$

$\sqrt[3]{\frac{5}{3}}=\sqrt[3]{(x+2)^3}$

$3-2$ -2

$\sqrt[3]{\frac{5}{3}}-2=x$



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