

① pg. 8-9 #44-47

② Discussion on Even & Odd Functions

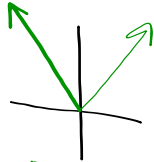
③ pg. 18-19 #59, 62

# Even & Odd Functions

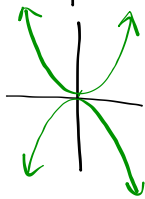
## EVEN

$$f(x) = f(-x)$$

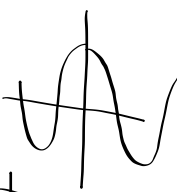
ex)  $f(x) = |x|$



ex)  $f(x) = x^2$



ex)  $f(x) = \cos(x)$



Symmetrical about  
the y-axis.

## ODD

$$-f(x) = f(-x)$$

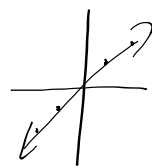
OR

$$f(x) = -f(-x)$$

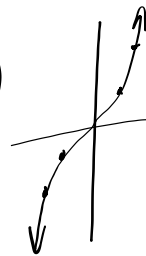
ex)  $f(x) = \sin(x)$



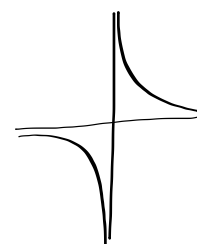
ex)  $f(x) = x$



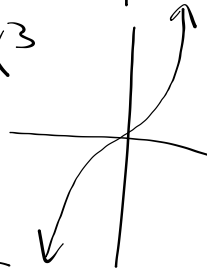
ex)  $f(x) = \tan(x)$



ex)  $f(x) = \frac{1}{x}$



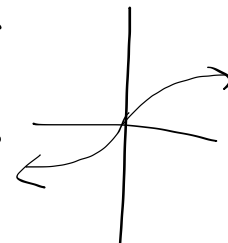
ex)  $f(x) = x^3$



ex)  $f(x) = \sqrt[3]{x}$

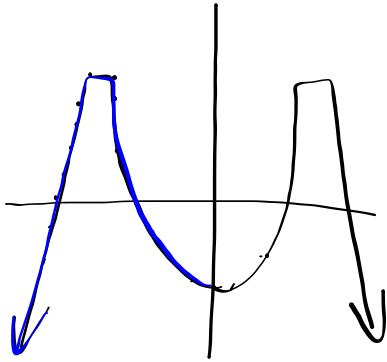
OR

$$x^{1/3}$$

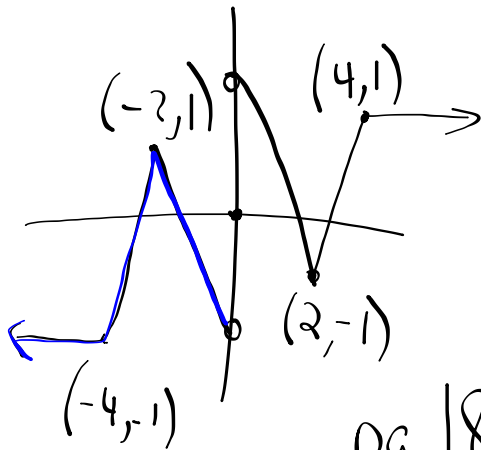


A 180° rotation  
around (0,0) maps  
onto itself.

ex) If  $m(x)$  is even, draw the rest.



ex) If  $p(x)$  is odd, draw the rest



\* For an odd function to be continuous, it must pass thru  $(0, 0)$ .

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