

MTH112 Tues. 9-10-12 CLASS NOTES

EX Pg 376 Even, Odd, or Neither

$$f(x) = 5x^2 - 3 \quad \checkmark$$

Find $f(-x)$

$$\begin{aligned} f(-x) &= 5(-x)^2 - 3 \\ &= 5x^2 - 3 \quad \checkmark \end{aligned}$$

$$f(x) = f(-x) \therefore \underline{\text{even}}$$

$$\#60 \quad f(x) = x^3 - x$$

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

$$f(-x) = -x^3 + x \neq f(x)$$

$\therefore$ NOT EVEN

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

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

$$-f(x) = -x^3 + x \therefore$$

$$-f(x) = f(-x) \quad \boxed{\therefore \text{ODD}}$$