

#7

$$(a) \quad f(-x) = (-x)^2 \sqrt{1 - (-x)^2} = x^2 \sqrt{1 - x^2} = f(x)$$

so $f(-x) = f(x)$ and $f(x)$ is even

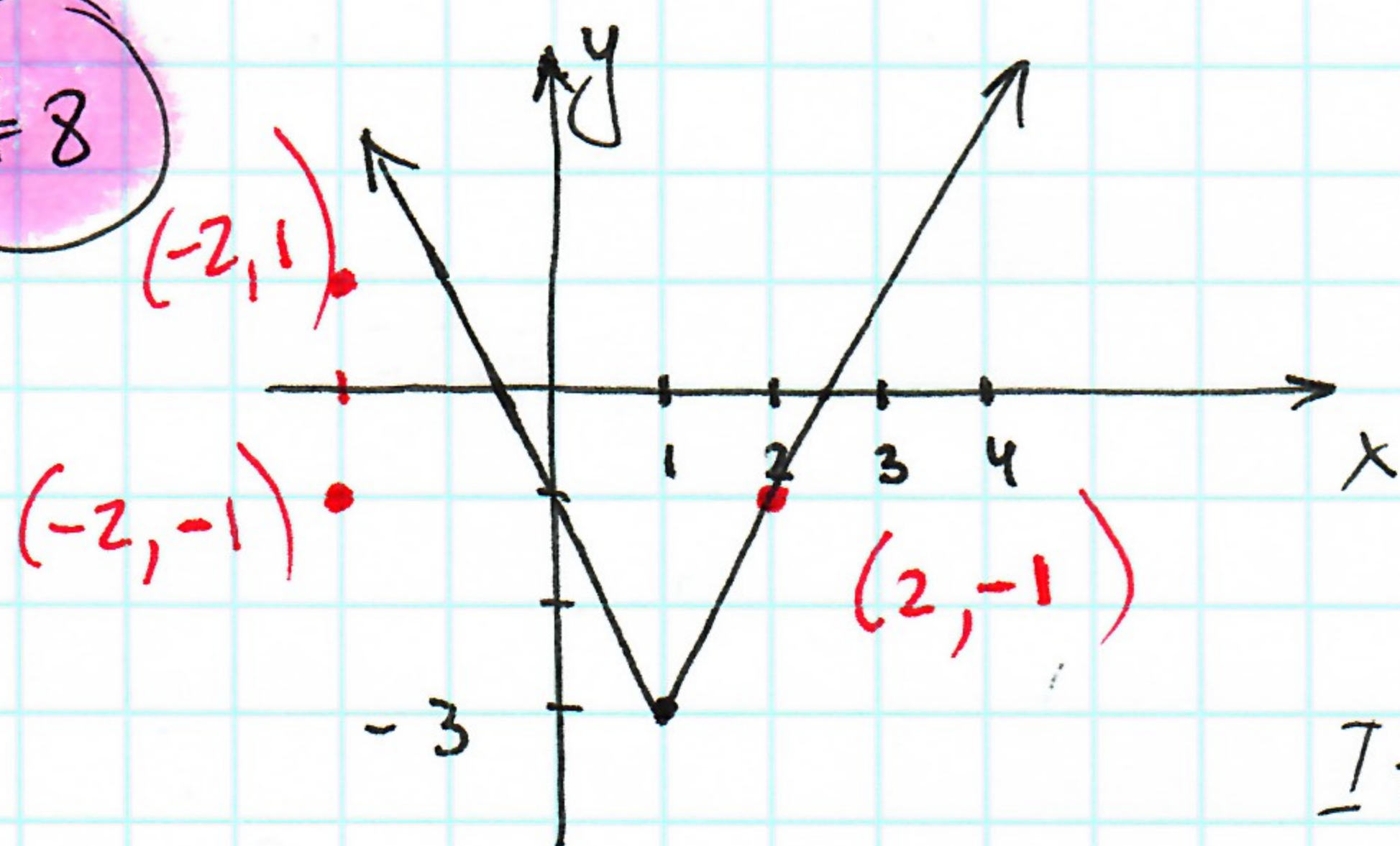
$$(b) \quad g(-x) = 2(-x)^3 - 6(-x)^5 = -2x^3 + 6x^5 = -g(x)$$

so $g(-x) = -g(x)$ and $g(x)$ is odd

$$(c) \quad r(-x) = (-x)^2 - (-x) = x^2 + x \neq r(x) \\ \neq -r(x)$$

so $r(x)$ is neither odd nor even

#8



it is not even, because point $(2, -1)$ is on the graph, but $(-2, 1)$ is not on the graph.

It is not odd either, because point $(2, -1)$ is on the graph, but $(-2, 1)$ is not.

Hence it is neither.

#9

see the answer in the pdf file w/ problems.