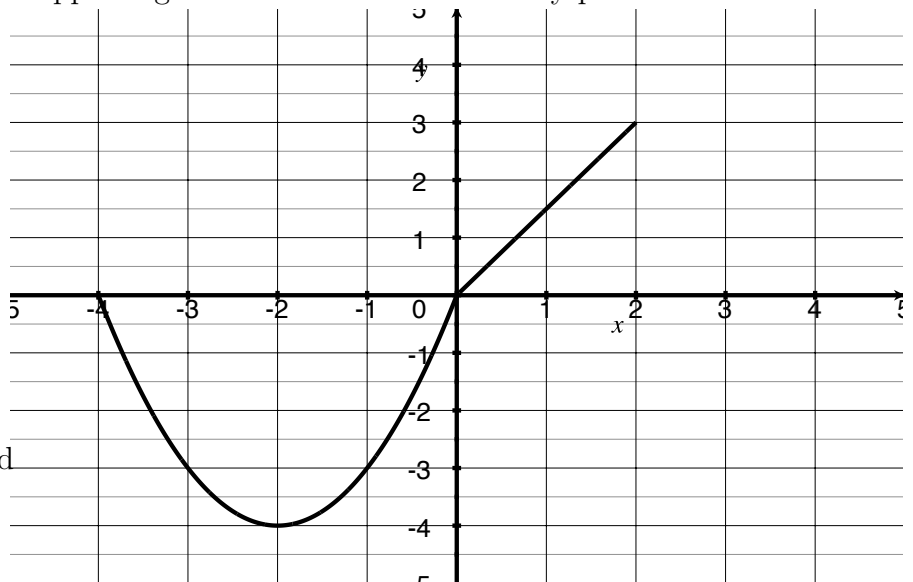# Quiz 2

Show *all* your work. Reasonable supporting work must be shown for any partial credit.

1. Consider the graph of f shown on the right.

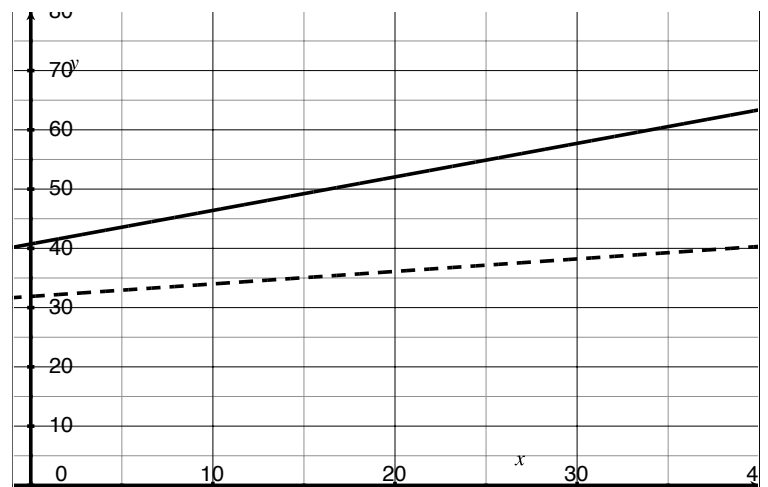   (a) [1] Find $(f(f(-2))$

   (b) [3] Given that f is comprised of a line & a parabola, find the piece-wise defined algebraic rule of f.

   (c) [3] Graph the function g defined by $g(x) = f(x+1) + 2$

2. The functions below (approximately) return the median annual income (reported in thousands of dollars) of Americans since 1960 for white Americans (w) and latinx Americans (l).

   (a) [1] Let x be the years since 1960, then $w(x) = .566x + 40.738$, and $l(x) = .211x + 31.886$. Identify which line is w and which line is l.

   (b) [2] Which population is seeing a larger increase in their median annual income? Justify your answer.

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