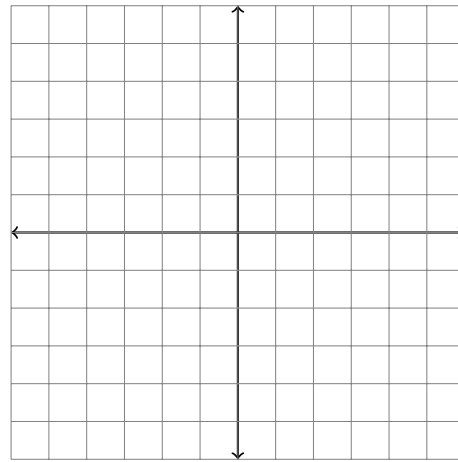
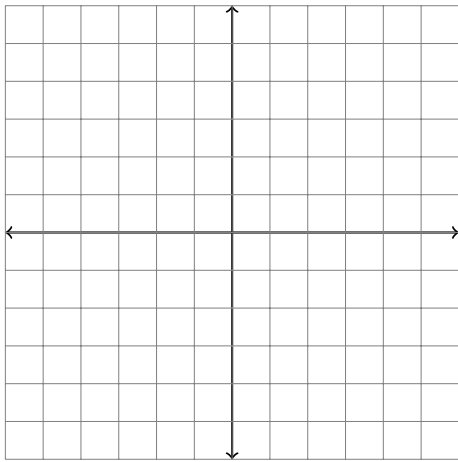
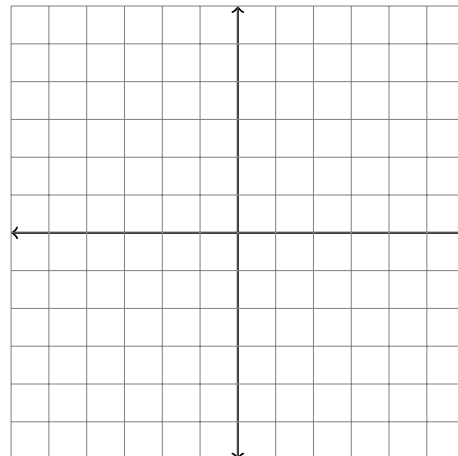
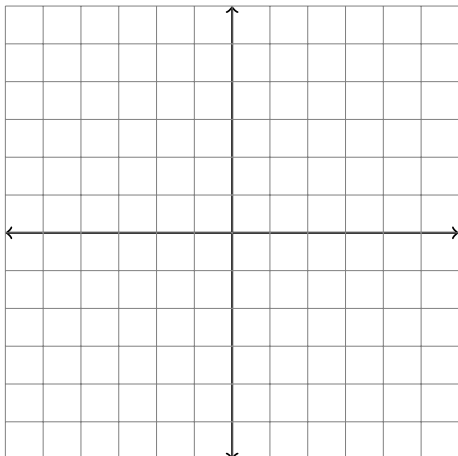


For each kind of the following problems, graph both $f(x)$ and $g(x)$, then determine a linear map which transforms one into the other.

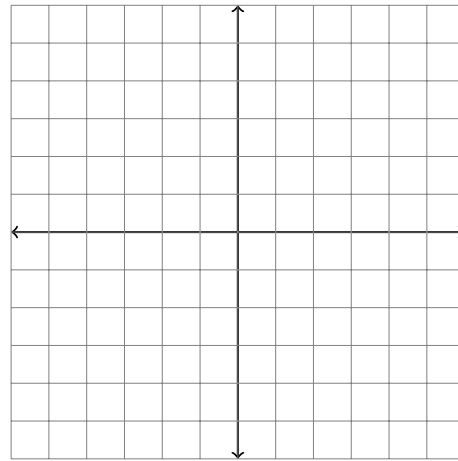
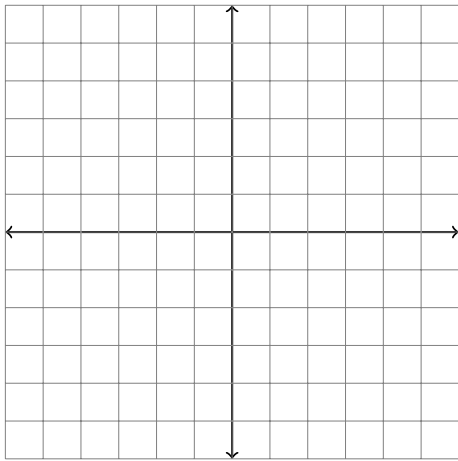
(a) $f(x) = x^2 + 1$, $g(x) = x^2 - 4x + 2$



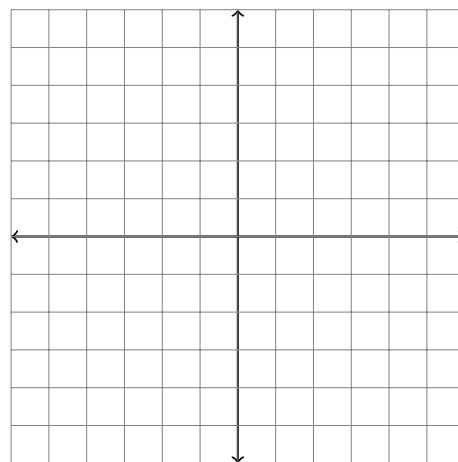
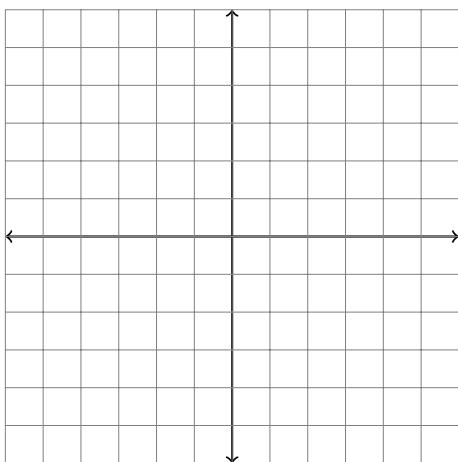
(b) $f(x) = 4x^2 + 2$, $g(x) = x^2 + 2$



(c) $f(x) = x^2 + 2x - 1$, $g(x) = x^2 + 2x + 1$

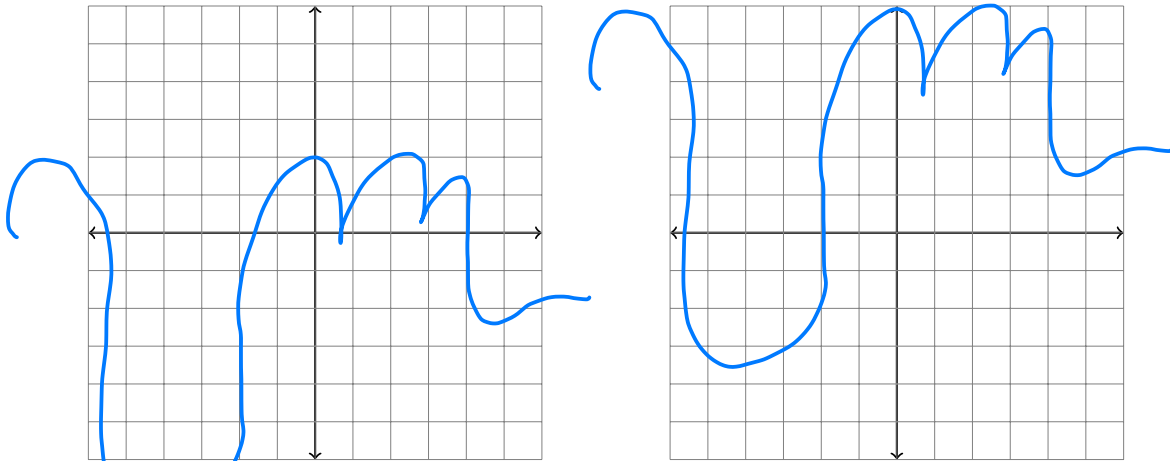


(d) $f(x) = 2x^3 - 4x$, $g(x) = x^3 - 2x$

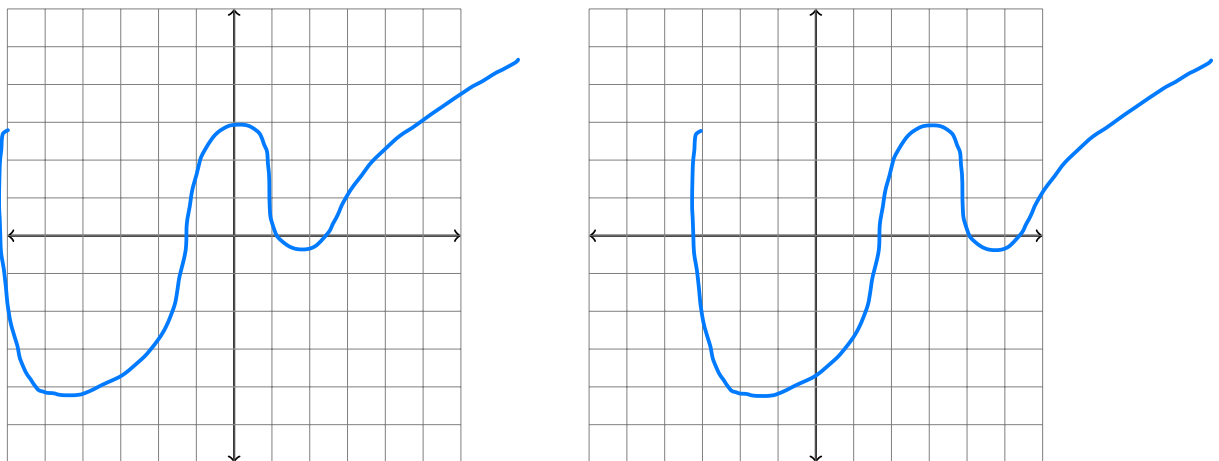


For each of the following pairs of graphs, write down a linear function which transforms one into the other:

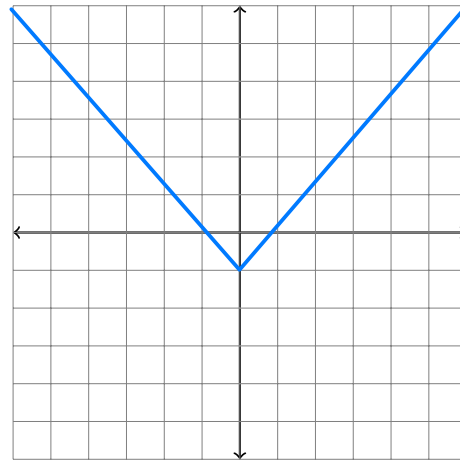
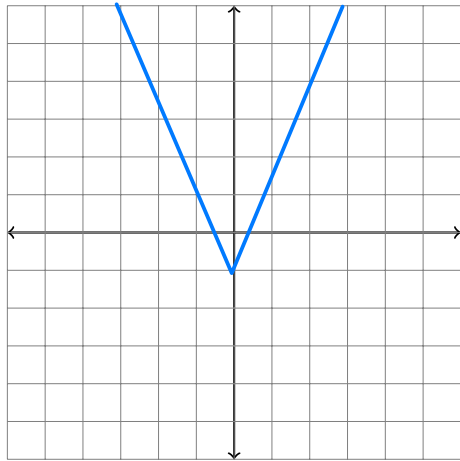
(a)



(b)



(c)



(d)

