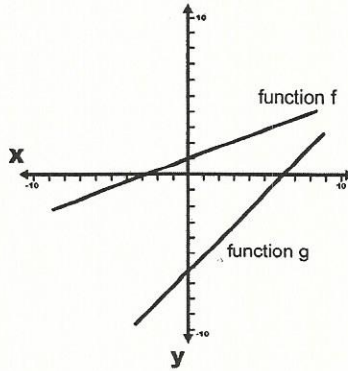


Name: _____

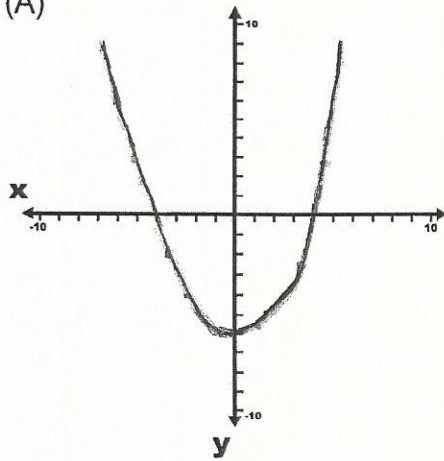
Quiz: Graphs Involving Operations on Functions

1. The following graph represents functions f and g :

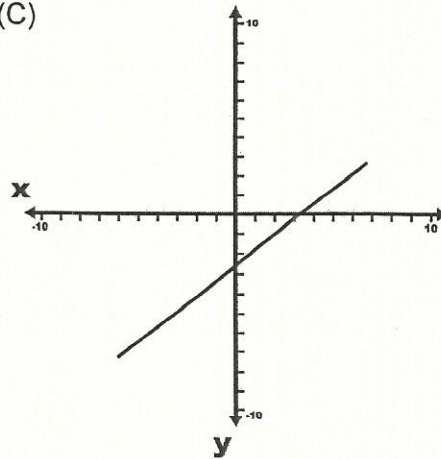


Which one of the following graphs could represent $f \cdot g$?

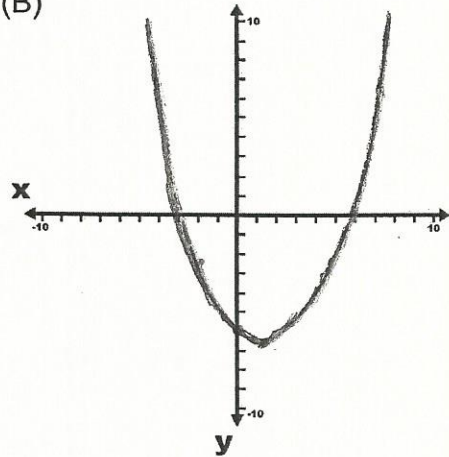
(A)



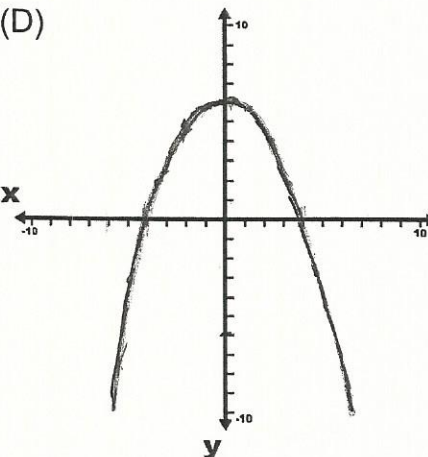
(C)



(B)



(D)



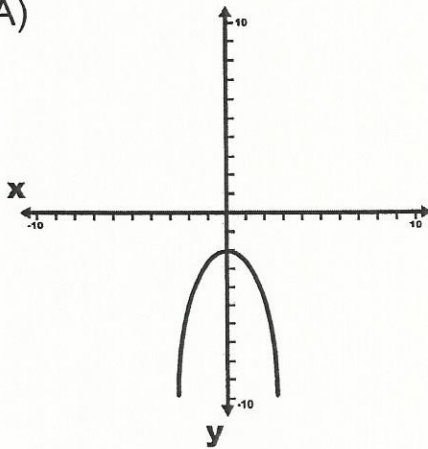
2. Functions f and g are defined as follows:

$$f(x) = a_1x^2 \text{ where } a_1 > 0$$

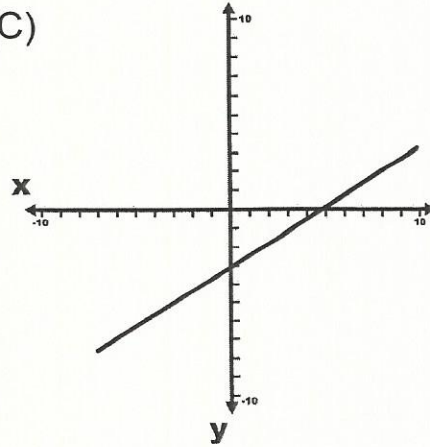
$$g(x) = a_2x^2 + c \text{ where } a_2 = -a_1 \text{ and } c < 0$$

Which one of the following graphs could represent $f + g$?

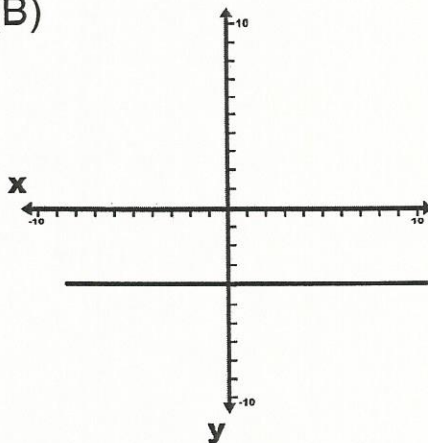
(A)



(C)



(B)



(D)

