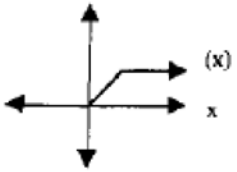
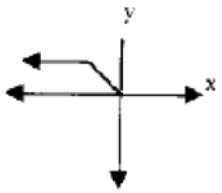
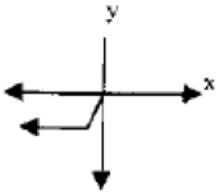
F.BF.B.3: Transformations with Functions 2

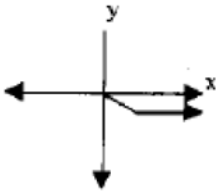
1 The graph below represents f(x).

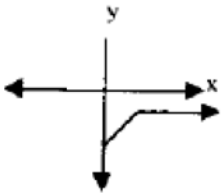


Which of the following is the graph of $-f(x)$?

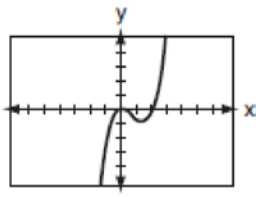
1)


2)


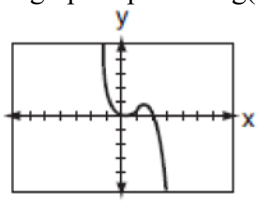
3)


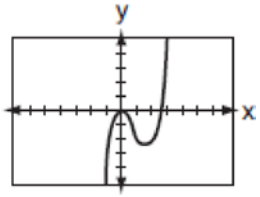
4)


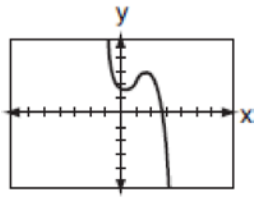
2 The accompanying graph represents the equation $y = f(x)$.

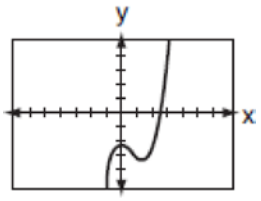


Which graph represents $g(x)$ if $g(x) = -f(x)$?

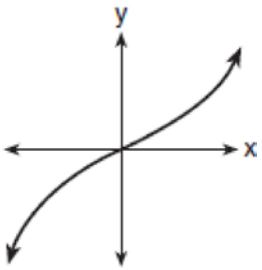
1)


2)


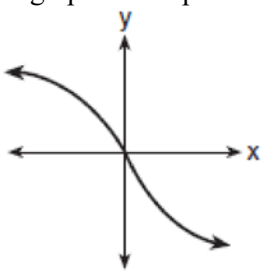
3)


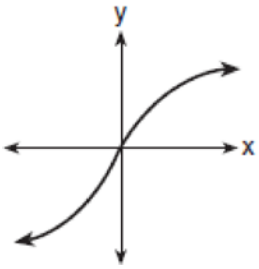
4)


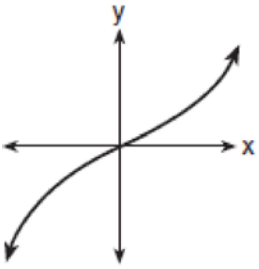
3 The graph below represents f(x).

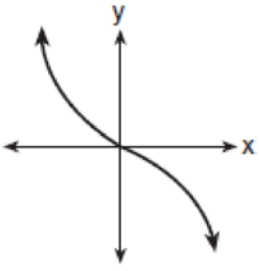


Which graph best represents f($-x$)?

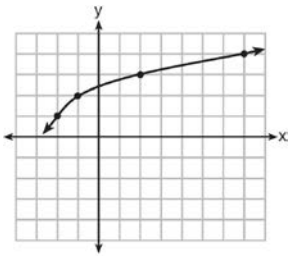
1)


2)


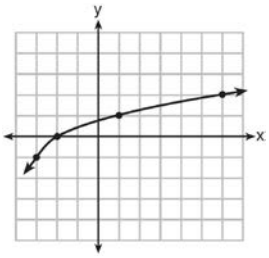
3)


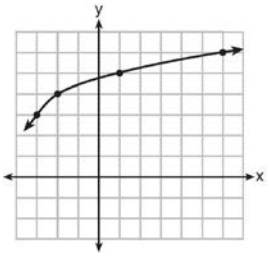
4)


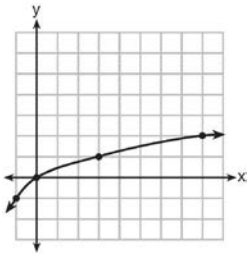
4 The graph of $y = f(x)$ is shown below.

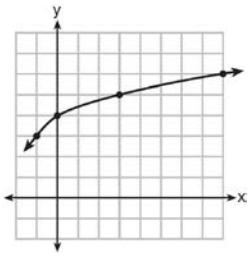


What is the graph of $y = f(x + 1) - 2$?

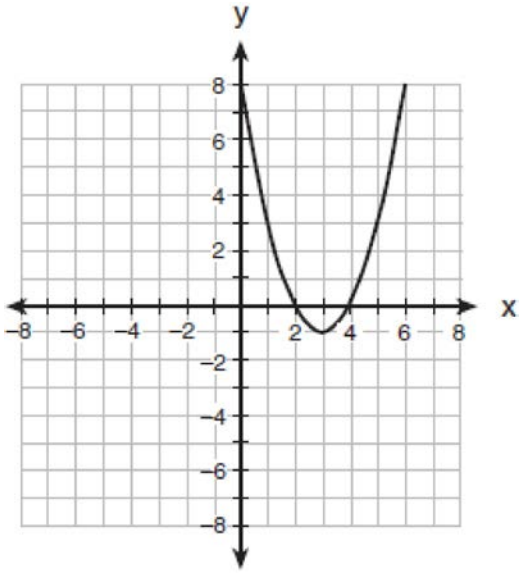
1)


2)


3)


4)


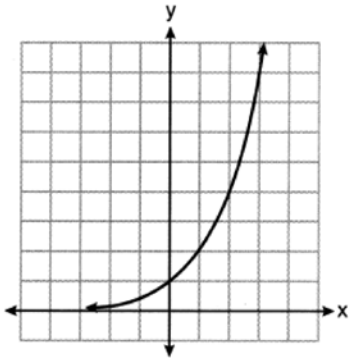
5 The parabola shown in the accompanying diagram undergoes a reflection in the y-axis.



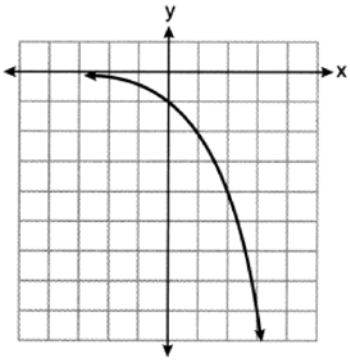
What will be the coordinates of the turning point after the reflection?

1) $(3,-1)$
2) $(3,1)$
3) $(-3,1)$
4) $(-3,-1)$

6 Consider the function $y = h(x)$, defined by the graph below.

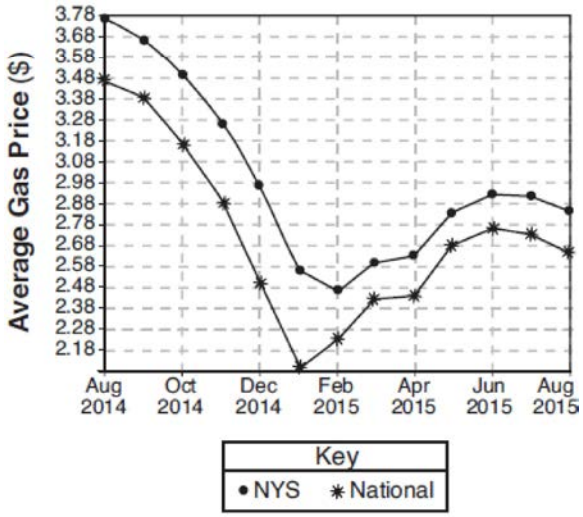


Which equation could be used to represent the graph shown below?



1) $y = h(x) - 2$
2) $y = h(x - 2)$
3) $y = -h(x)$
4) $y = h(-x)$

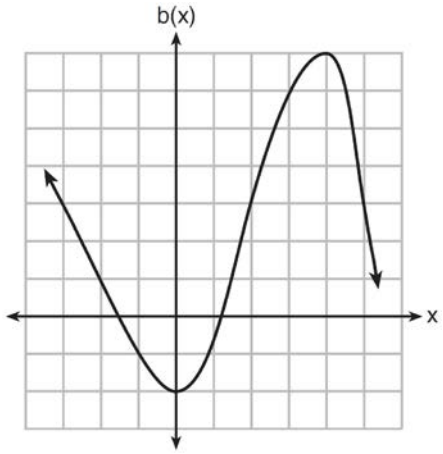
7 The graph below represents national and New York State average gas prices.



If New York State's gas prices are modeled by $G(x)$ and $C > 0$, which expression best approximates the national average x months from August 2014?

1) $G(x + C)$
2) $G(x) + C$
3) $G(x - C)$
4) $G(x) - C$

8 Richard is asked to transform the graph of $b(x)$ below.



The graph of $b(x)$ is transformed using the equation $h(x) = b(x - 2) - 3$. Describe how the graph of $b(x)$ changed to form the graph of $h(x)$.

F.BF.B.3: Transformations with Functions 2
Answer Section

1 ANS: 3 REF: fall9903b
2 ANS: 1 REF: 060701b
3 ANS: 4 REF: 080406b
4 ANS: 1 REF: 011620ai
5 ANS: 4 REF: 010901b
6 ANS: 3 REF: 062205aii
7 ANS: 4 REF: 081817aii
8 ANS:
2 units right and 3 units down.

REF: 081626ai