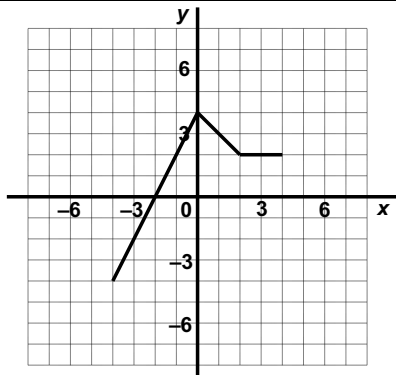


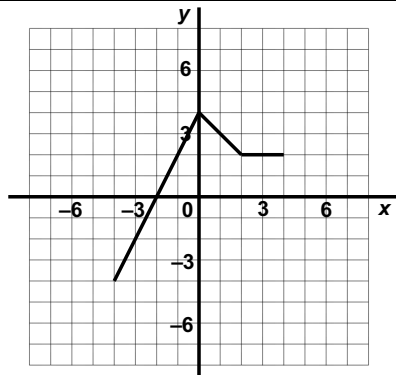
Combinations of Transformations (1)

Date:

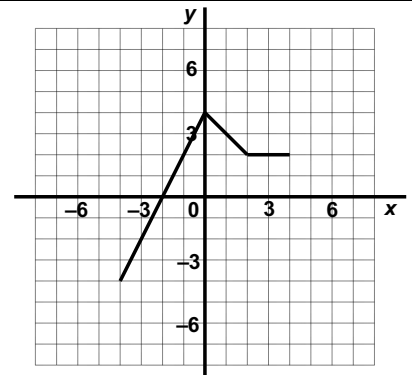
The function given in each graph below is $f(x)$. Sketch the graph of the indicated new function.



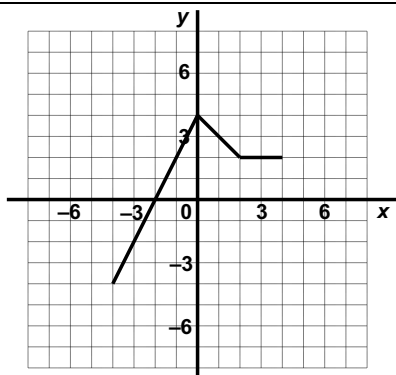
1. $y = f(x) - 3$



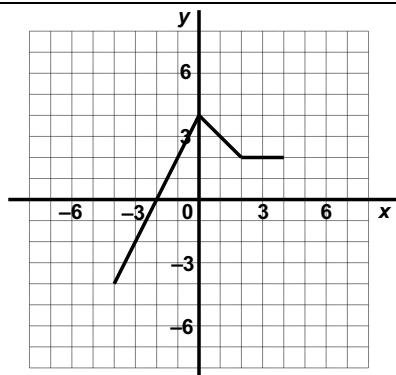
2. $y = f(x - 4)$



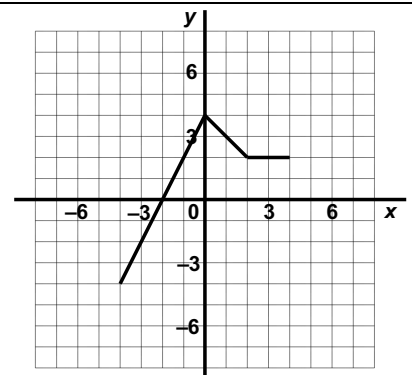
3. $y = f(x + 2)$



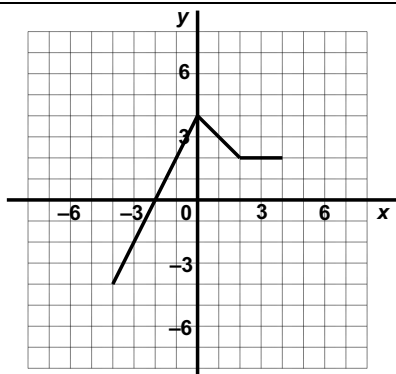
4. $y = f(x - 3) - 4$



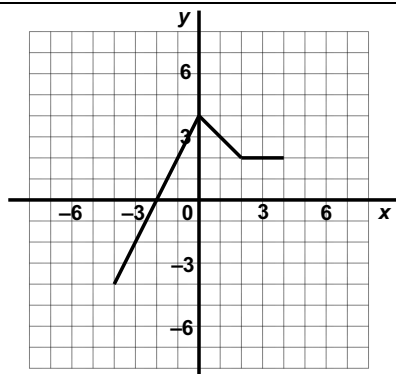
5. $y = f(x + 4) + 4$



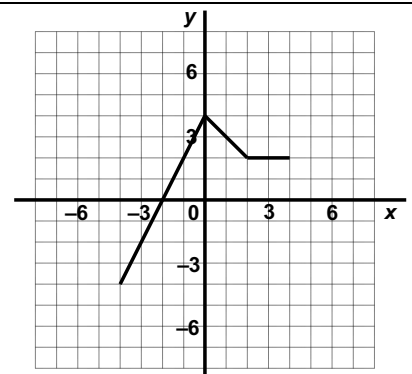
6. $y = 2f(x)$



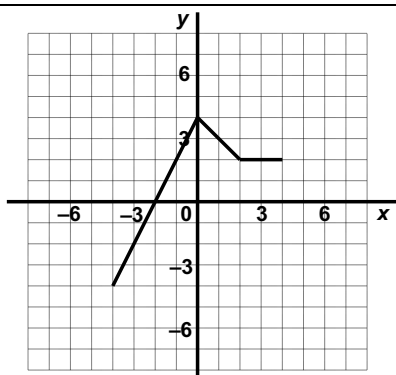
7. $y = \frac{3}{4}f(x)$



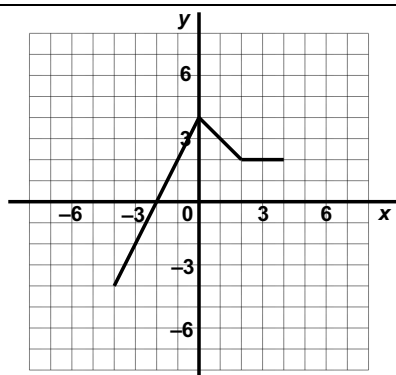
8. $y = f(\frac{1}{2}x)$



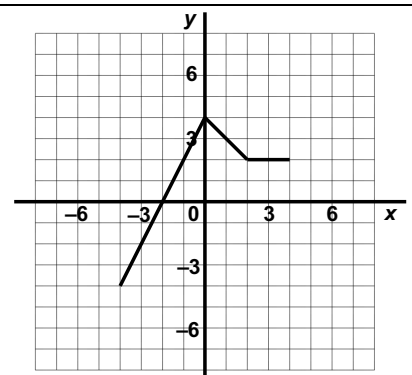
9. $y = f(2x)$



10. $y = \frac{1}{2}f(\frac{2}{3}x)$



11. $y = -f(x)$



12. $y = f(-x)$