

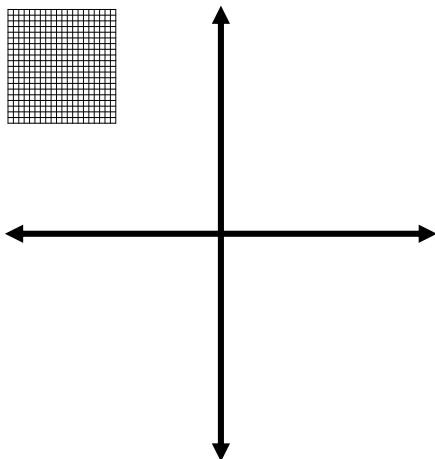
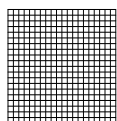
## Algebra 2: Chapter 1.2 Day 1 Homework

### Transformations of Linear & Absolute Value Functions

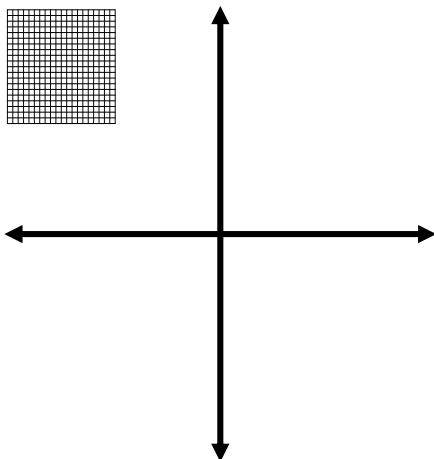
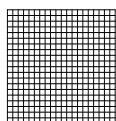
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In Exercises 1–10, write a function  $g$  whose graph represents the indicated transformation of the graph of  $f$ . Then graph BOTH the original function  $f(x)$  and the transformed function  $g(x)$  on the same graph. Label each graph. You can use a graphing calculator to check your answer.

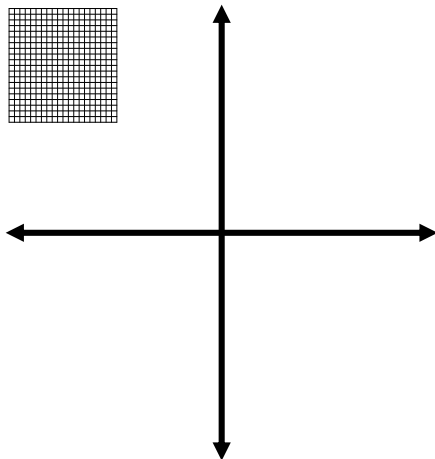
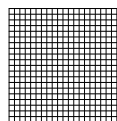
1.  $f(x) = x - 2$ ; translation 5 units left



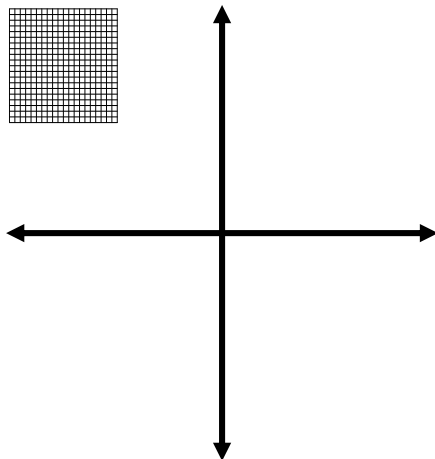
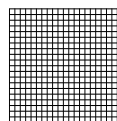
2.  $f(x) = x + 1$ ; translation 4 units right



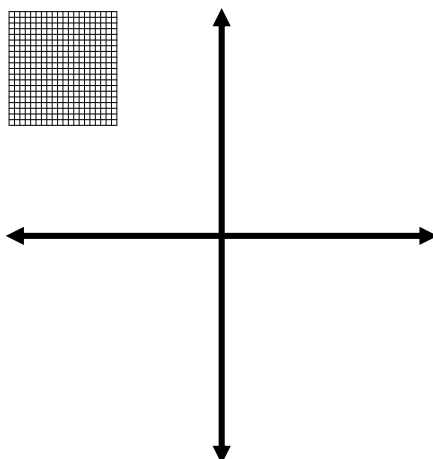
3.  $f(x) = |3x + 2| + 4$ ; translation 3 units down



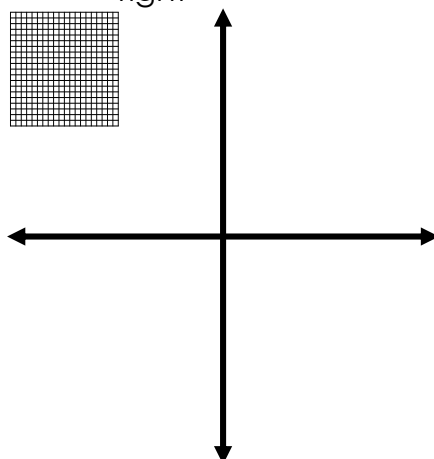
4.  $f(x) = 4x - 5$ ; translation 3 units up



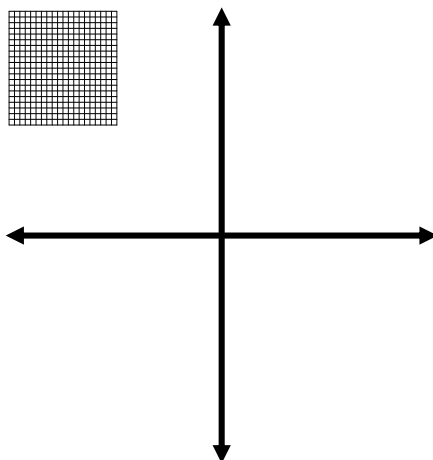
5.  $f(x) = x - 5$ ; translation 4 units left



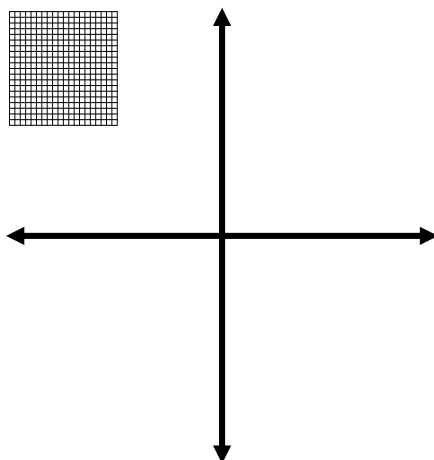
6.  $f(x) = x + 2$ ; translation 2 units to the right



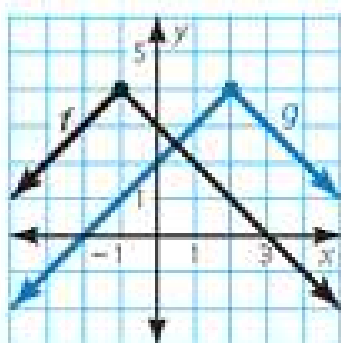
7.  $f(x) = |4x + 3| + 2$ ; translation 2 down



8.  $f(x) = 2x - 9$ ; translation 6 units up



9.  $f(x) = 4 - |x + 1|$



10.  $f(x) = |4x| + 5$

