

# Quadratics 7 – Solving Quadratic Inequalities

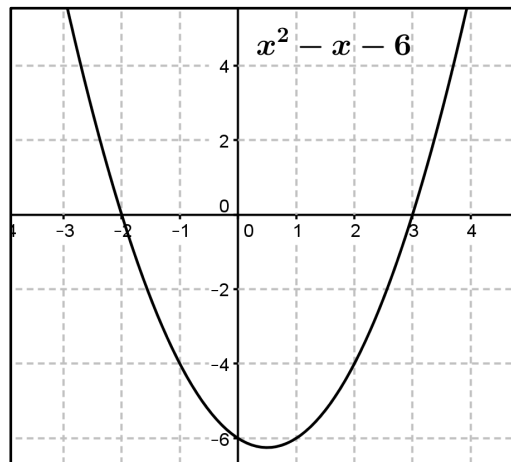
Name \_\_\_\_\_

## Homework #2

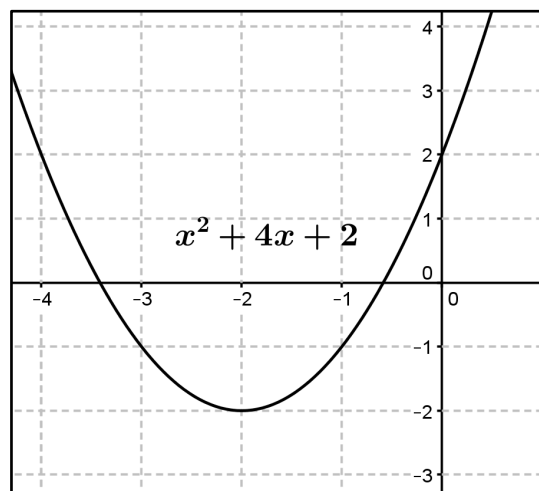
Per \_\_\_\_ Date \_\_\_\_\_

Write your answer in the three standard forms (complete sentence, set notation, and interval notation).

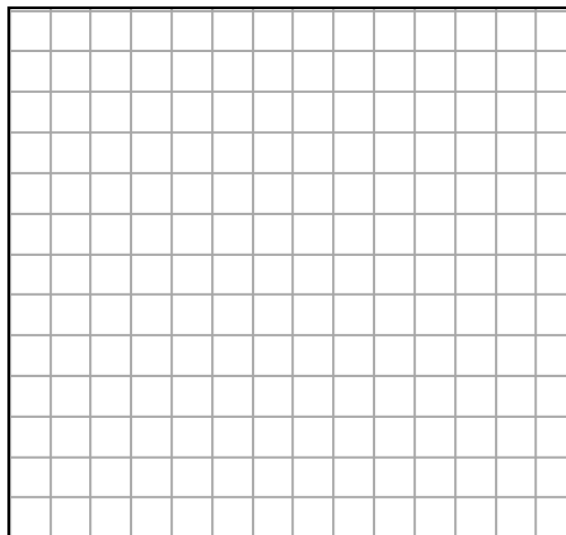
1. Using the graph to the right, solve for  $x$  such that  $x^2 - x - 6 \leq 0$



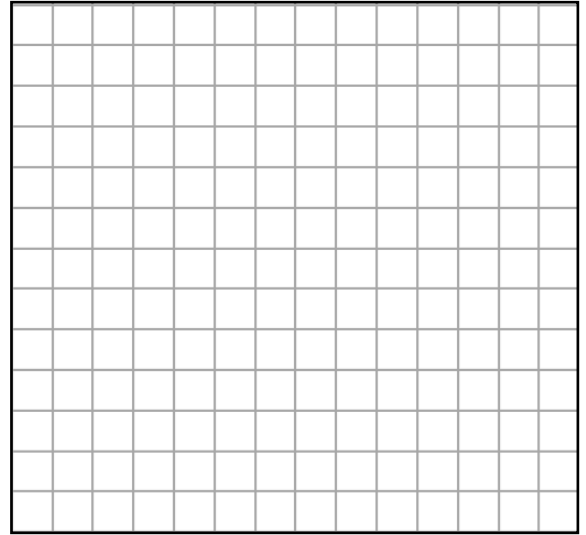
2. Using the graph to the right, solve for  $x$  such that  $x^2 + 4x + 2 > -1$



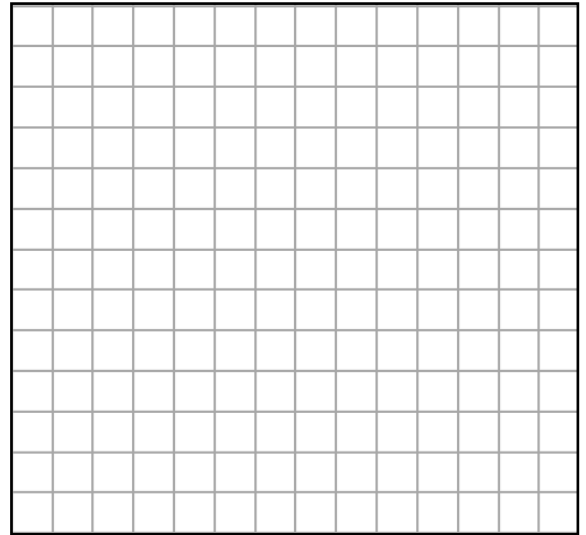
3. Solve for  $x$  such that  $-(x+2)(x-4) < 0$ .



4. Solve for  $x$  such that  $2(x-1)^2 - 2 \leq 0$ .



5. Solve for  $x$  such that  $x^2 - x - 5 \geq 0$ .



6. Using the graph to the right

a. Solve for  $x$  when  $f(x) = g(x)$

$x =$  \_\_\_\_\_

b. Solve for  $x$  when  $g(x) > f(x)$ . Write your answer in one of the three forms.

