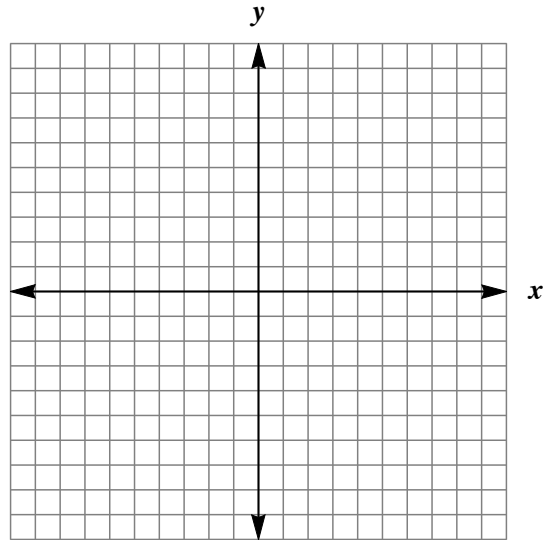


# Quiz 1: Version A

First & Last Name: \_\_\_\_\_ Class: \_\_\_\_\_

1. Sketch the following piecewise function:

$$f(x) = \begin{cases} -x + 2 & x < 0 \\ -4 & x \geq 0 \end{cases}$$



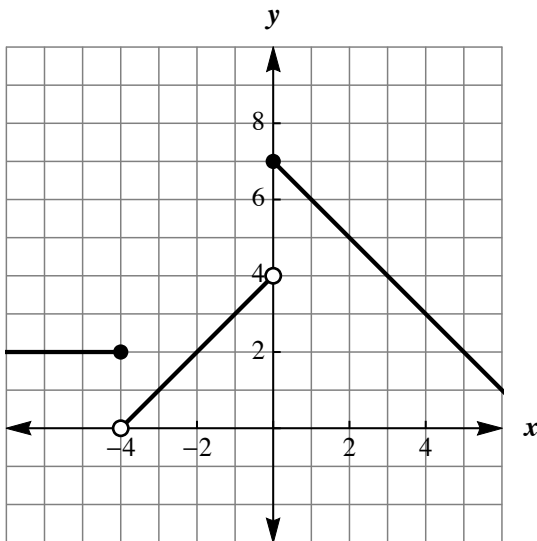
2. For the function in Question 1, evaluate:

a.  $f(-3) =$

b.  $f(0) =$

c.  $f(3) =$

3. Write the equation for the following graph:



## Challenge Options (required for Honors)

4. Convert  $(10, -5)$  into polar coordinates. Show your work.
5. Convert  $(23^\circ, 16)$  into rectangular (Cartesian) coordinates. Show your work.
6. Write an example of a polynomial function with at least three terms, even degree, and positive leading coefficient. Explain its end behavior.
7. Write an example of a polynomial function with four terms, a non-zero constant term, odd degree greater than 5, and negative leading coefficient. Explain its end behavior.