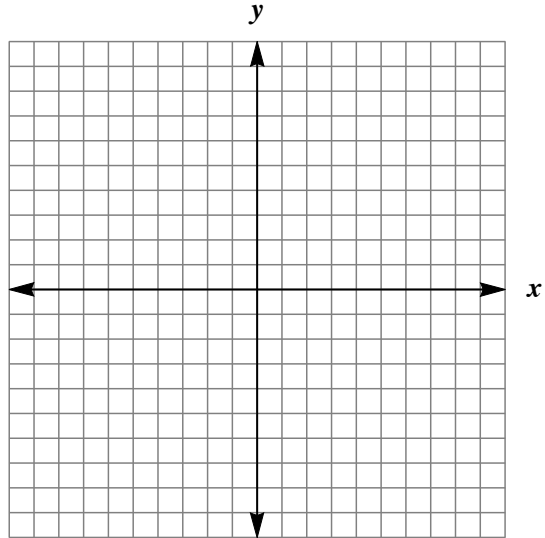


# Quiz 1: Practice Version

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

1. Sketch the following piecewise function:

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



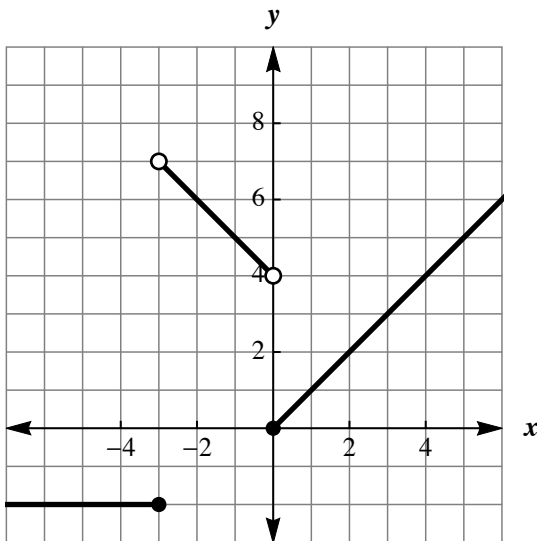
2. For the function in Question 1, evaluate:

a.  $f(-2) =$

b.  $f(0) =$

c.  $f(4) =$

3. Write the equation for the following graph:



## Challenge Options (required for Honors)

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