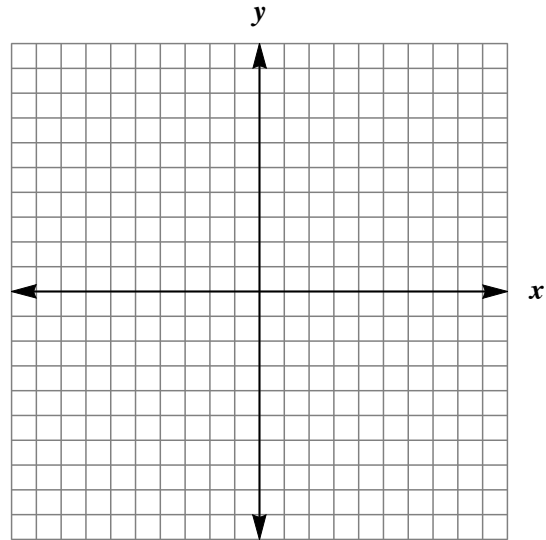


# Quiz 1: Version B

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

1. Sketch the following piecewise function:

$$f(x) = \begin{cases} 2x+4 & x \leq -3 \\ 5 & x > -3 \end{cases}$$



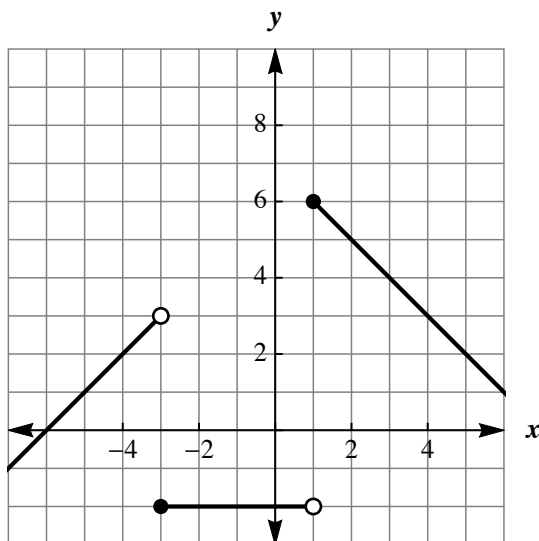
2. For the function in Question 1, evaluate:

a.  $f(-5) =$

b.  $f(-3) =$

c.  $f(2) =$

3. Write the equation for the following graph:



## Challenge Options (required for Honors)

4. Convert  $(8, -5)$  into polar coordinates. Show your work.
5. Convert  $(75^\circ, 16)$  into rectangular (Cartesian) coordinates. Show your work.
6. Write an example of a polynomial function with at least two 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 6, and positive leading coefficient. Explain its end behavior.