

NAME: _____ Score _____/10

1. Fill in the blanks.

Problem: Consider the function whose rule is given by the equation $f(x) = (x - \sqrt{3})(x + \pi)$

- a. What kind of function is f ? _____
- b. What is the shape of its graph? _____
- c. What are the x -intercepts of its graph? _____
- d. For what values of x is $f(x) > 0$? Write your answer in interval notation. _____
- e. For what values of x is $f(x) < 0$? Write your answer in interval notation. _____