$\qquad$ Due Date $\qquad$ Period $\qquad$

### 10.3 Characteristics of a Function

For each of the following label the characteristics of the function: the intervals where the function is positive and negative, intervals where the function is increasing or decreasing, and if applicable the $x$ and $y$ intercepts. Pick 6 of the following to complete.

1) Use Inequalities

Positive:
Negative:
Increasing:
Decreasing:
x-Intercepts:

3) Use Inequalities

Positive:
Negative:
Increasing:
Decreasing:
x-Intercepts:
$y$-intercepts:

2) Use interval notation

Positive:
Negative:
Increasing:
Decreasing:
y-Intercepts:
x-Intercepts:

4) Use Inequalities

Positive:
Negative:
Increasing:
Decreasing:
y-Intercepts:

5) Use Interval notation Positive:
Negative:
Increasing:
Decreasing:
x-Intercepts:
y-intercepts:


Graph of $f^{\prime}$
6) Use Inequalities

Positive:
Increasing:
Decreasing:
x-Intercepts:
y-intercepts:

8) Use interval notation

Positive:
Negative:
Increasing:
Decreasing:
x-Intercepts:
y-Intercepts


