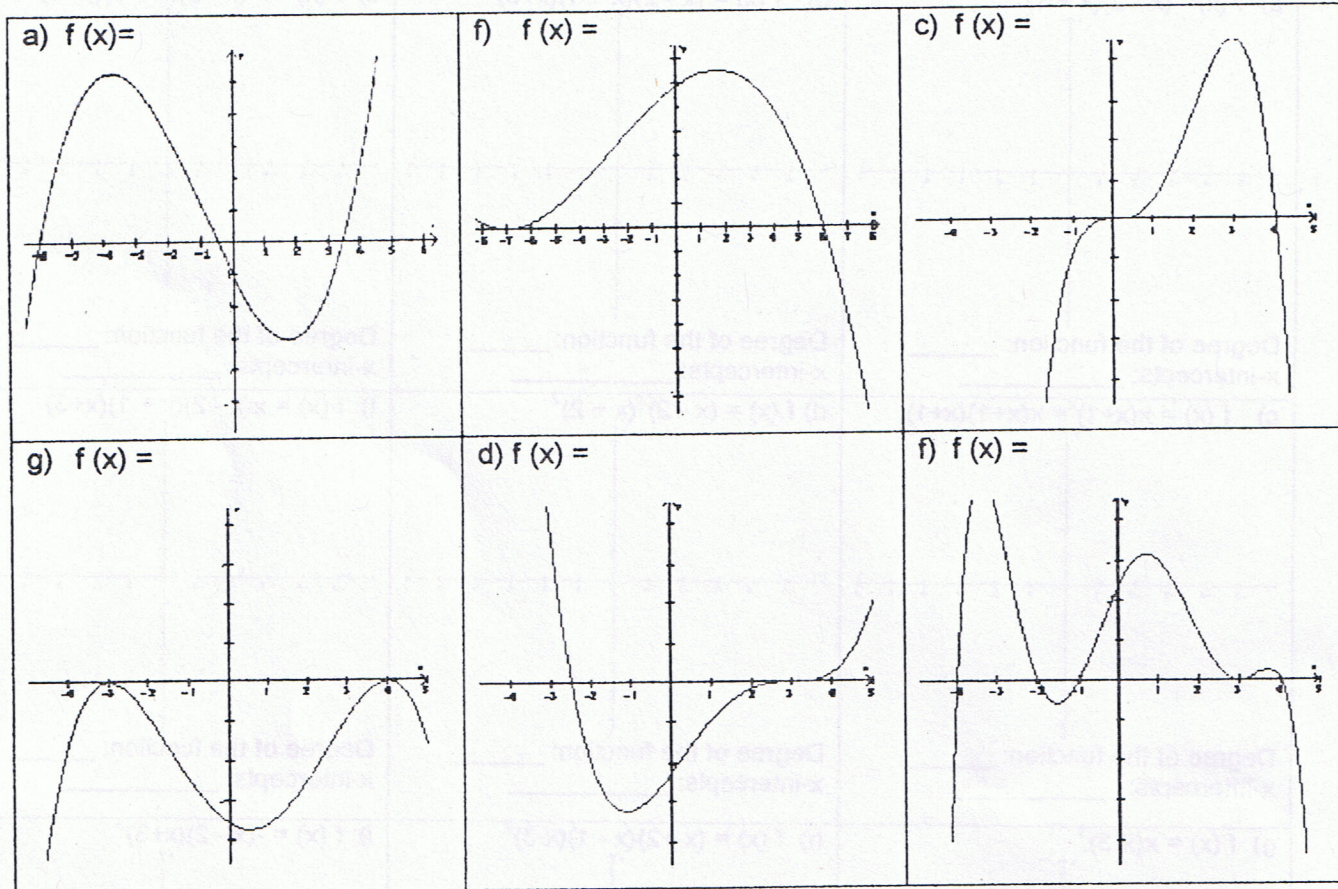


### 1.7.3: What's My Polynomial Name?

1. Determine a possible equation for each polynomial function.



2. Determine an example of an equation for a function with the following characteristics:

- a) Degree 3, a double root at 4, a root at -3 \_\_\_\_\_
- b) Degree 4, an inflection point at 2, a root at 5 \_\_\_\_\_
- c) Degree 3, roots at  $\frac{1}{2}$ ,  $\frac{3}{4}$ , -1 \_\_\_\_\_
- d) Degree 3, starting in quadrant 2, ending in quadrant 4, root at -2 and double root at 3  
\_\_\_\_\_
- e) Degree 4, starting in quadrant 3, ending in quadrant 4, double roots at -10 and 10  
\_\_\_\_\_