

2.8 HW

1. For each of the following sets of numbers, find the equation of a function that has these numbers as roots.

a. $-3 + i$ and $-3 - i$

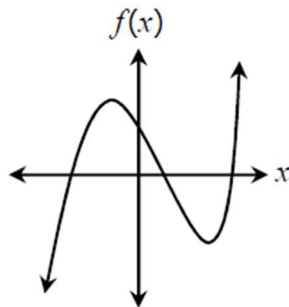
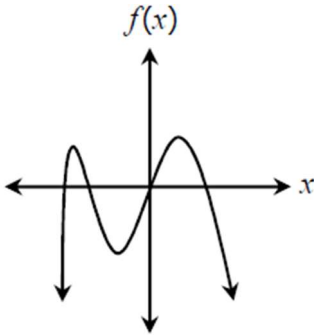
b. $5 + \sqrt{3}$ and $5 - \sqrt{3}$

c. $-2, \sqrt{7}$, and $-\sqrt{7}$

d. $4, -3 + i$, and $-3 - i$

Directions:

Determine the sign of the leading coefficient and whether the function has an even or odd degree.



Draw sketches to help remember the end behavior patterns

	EVEN Degree	ODD Degree
POSITIVE Leading Coefficient		
NEGATIVE Leading Coefficient		

2.8 HW

1. For each of the following sets of numbers, find the equation of a function that has these numbers as roots.

a. $-3 + i$ and $-3 - i$

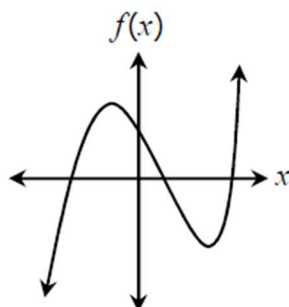
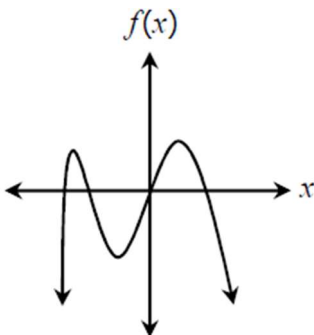
b. $5 + \sqrt{3}$ and $5 - \sqrt{3}$

c. $-2, \sqrt{7}$, and $-\sqrt{7}$

d. $4, -3 + i$, and $-3 - i$

Directions:

Determine the sign of the leading coefficient and whether the function has an even or odd degree.

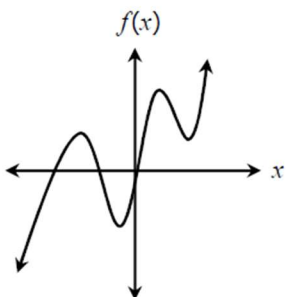


Draw sketches to help remember the end behavior patterns

	EVEN Degree	ODD Degree
POSITIVE Leading Coefficient		
NEGATIVE Leading Coefficient		

Directions: For each graph, **(a)** Describe the end behavior, **(b)** Determine whether it's the graph of an even or odd degree function, and **(c)** Determine the sign of the leading coefficient.

1.

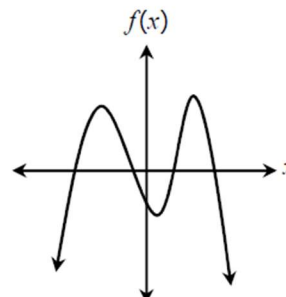


a) _____

b) _____

c) _____

2.



a) _____

b) _____

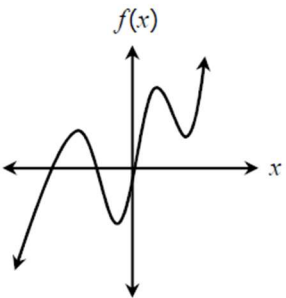
c) _____

3. Describe the end behavior of a 14th degree polynomial with a positive leading coefficient.

4. Describe the end behavior of a 9th degree polynomial with a negative leading coefficient.

Directions: For each graph, **(a)** Describe the end behavior, **(b)** Determine whether it's the graph of an even or odd degree function, and **(c)** Determine the sign of the leading coefficient.

1.

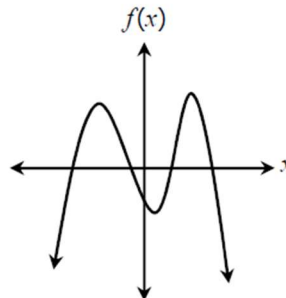


a) _____

b) _____

c) _____

2.



a) _____

b) _____

c) _____

3. Describe the end behavior of a 14th degree polynomial with a positive leading coefficient.

4. Describe the end behavior of a 9th degree polynomial with a negative leading coefficient.