Math Virtual Learning

Algebra 2A
Polynomial Parent Functions

May 20, 2020

Lesson:
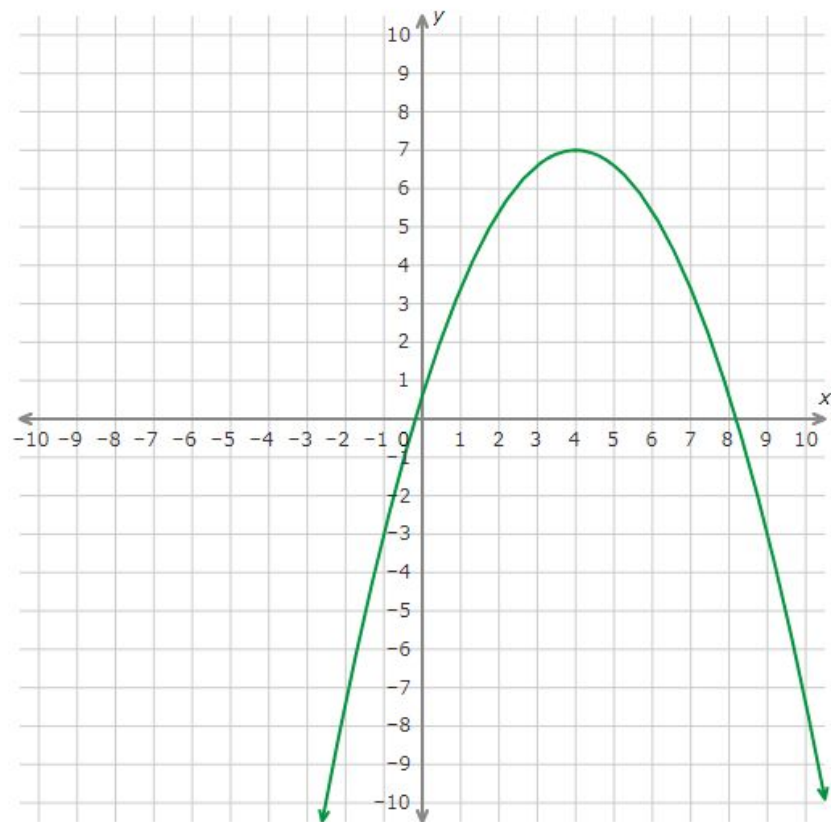Sketching Polynomial Parent Functions

Learning Target:
LT C2 I can identify key features (zeros, multiplicity, end behavior, y-intercept, local minimums and maximums, turning points, transformations).

Objective:
Students will be able to identify parts of a graph.

Warm Up

This is the graph of a polynomial function. The absolute maximum is shown on the graph.

Find the domain and range.

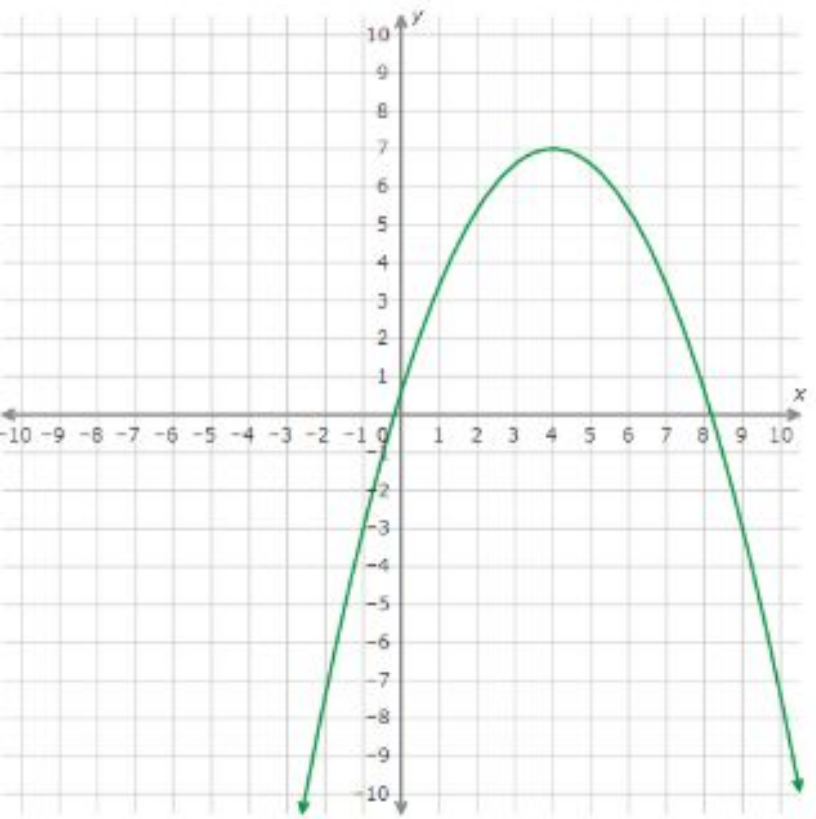| $(-\infty, \infty)$ | $(-\infty, \infty)$ | $(-\infty, 7]$ | $[-4, \infty)$ |

Domain:

Range:

Warm Up Answer

Domain: $(-\infty, \infty)$

Range: $(-\infty, 7]$

Lesson

Today we are going to find multiplicity on a graph.

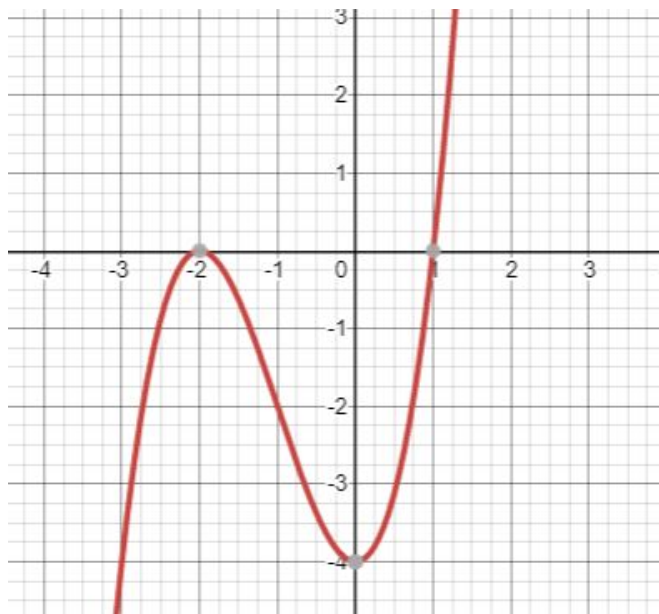Find the Multiplicity and Zeros of a Polynomial when It is in Factored Form:
https://www.youtube.com/watch?v=Y6l0aZ5Cg84

Multiplicity of zeros of polynomials | Polynomial graphs | Algebra 2 | Khan
Academy: https://www.youtube.com/watch?v=jrFLb9ZoZH0
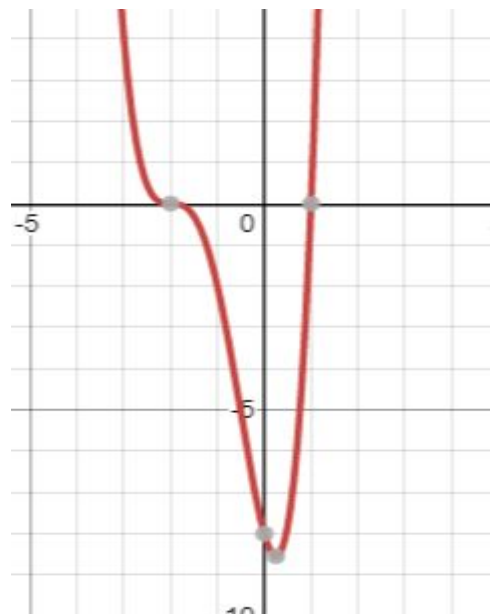
Practice

List the zeros and the multiplicity for each of the following graphs.

1

2..

Practice Continued

3.
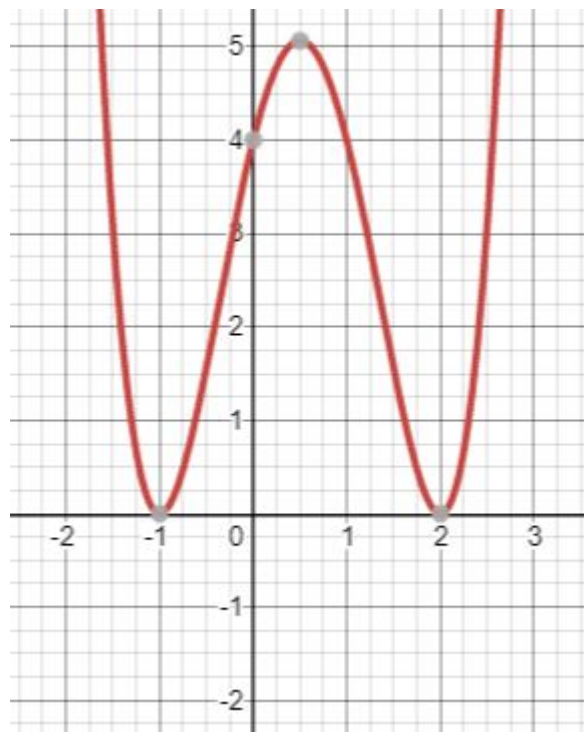
4.
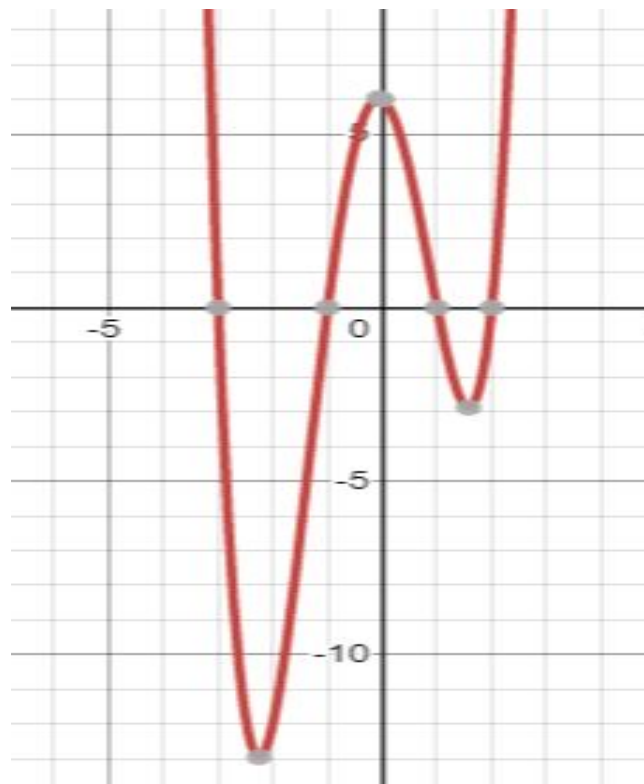
Answers to Practice Problems

1.

zeros	multiplicity
-2	2
1	1

2.

zeros	multiplicity
-2	3
1	1

3.

zeros	multiplicity
-1	2
2	2

4.

zeros	multiplicity
-3	1
-1	1
1	1
2	1