

# WORKSHEET 2.9 PART 2 – Analyzing Graphs of Polynomials



Name: \_\_\_\_\_ Hour: \_\_\_\_\_ Date: \_\_\_\_\_

**DIRECTIONS:** State what you know by analyzing the graph of each polynomial function. Also, write an equation for the polynomial. (2.9.A)

1)  $x$ -intercepts: \_\_\_\_\_

End behavior:

$f(x) \rightarrow$  \_\_\_\_\_ as  $x \rightarrow -\infty$

$f(x) \rightarrow$  \_\_\_\_\_ as  $x \rightarrow +\infty$

Equation: \_\_\_\_\_

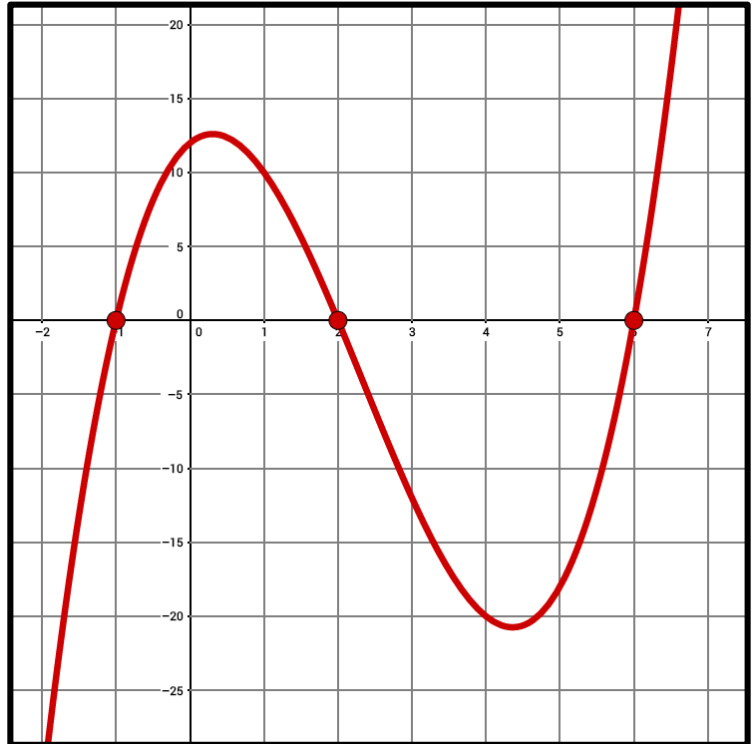
$y$ -intercept (approx.): \_\_\_\_\_

Local maximum(s) (approx.):

\_\_\_\_\_

Local minimum(s) (approx.):

\_\_\_\_\_



2)  $x$ -intercepts: \_\_\_\_\_

End behavior:

$f(x) \rightarrow$  \_\_\_\_\_ as  $x \rightarrow -\infty$

$f(x) \rightarrow$  \_\_\_\_\_ as  $x \rightarrow +\infty$

Equation: \_\_\_\_\_

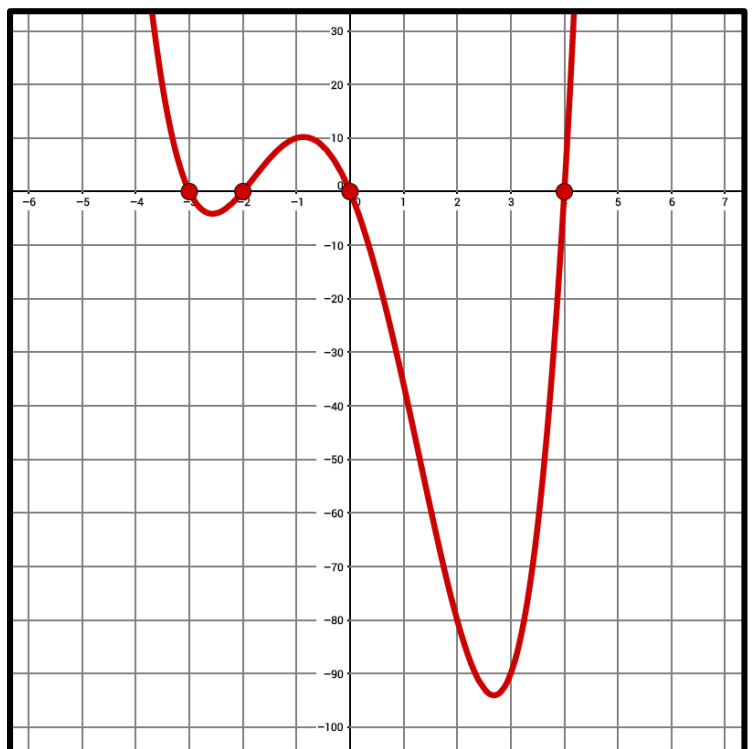
$y$ -intercept (approx.): \_\_\_\_\_

Local maximum(s) (approx.):

\_\_\_\_\_

Local minimum(s) (approx.):

\_\_\_\_\_



3)  $x$ -intercepts: \_\_\_\_\_

End behavior:

$f(x) \rightarrow$  \_\_\_\_\_ as  $x \rightarrow -\infty$

$f(x) \rightarrow$  \_\_\_\_\_ as  $x \rightarrow +\infty$

Equation: \_\_\_\_\_

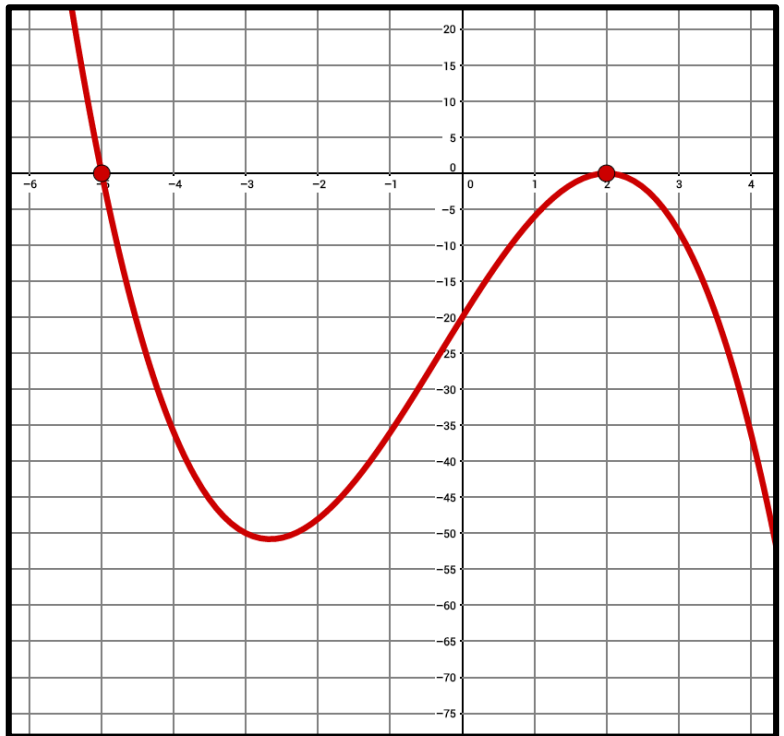
$y$ -intercept (approx.): \_\_\_\_\_

Local maximum(s) (approx.):

\_\_\_\_\_

Local minimum(s) (approx.):

\_\_\_\_\_



4)  $x$ -intercepts: \_\_\_\_\_

End behavior:

$f(x) \rightarrow$  \_\_\_\_\_ as  $x \rightarrow -\infty$

$f(x) \rightarrow$  \_\_\_\_\_ as  $x \rightarrow +\infty$

Equation: \_\_\_\_\_

$y$ -intercept (approx.): \_\_\_\_\_

Local maximum(s) (approx.):

\_\_\_\_\_

Local minimum(s) (approx.):

\_\_\_\_\_

