

Name: \_\_\_\_\_

Date: \_\_\_\_\_

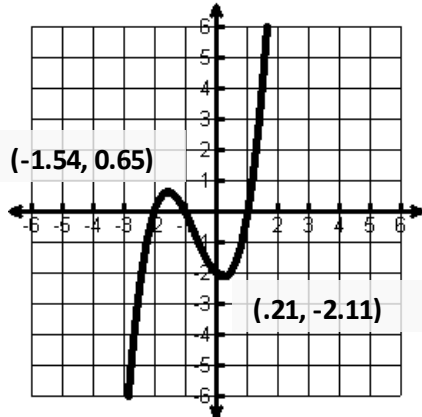
1.  $f(x) = x^3 + 2x^2 - x - 2$

Rel. Max: \_\_\_\_\_ Rel. Min: \_\_\_\_\_

Abs. Max: \_\_\_\_\_ Abs. Min: \_\_\_\_\_

Inc: \_\_\_\_\_ Dec: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_



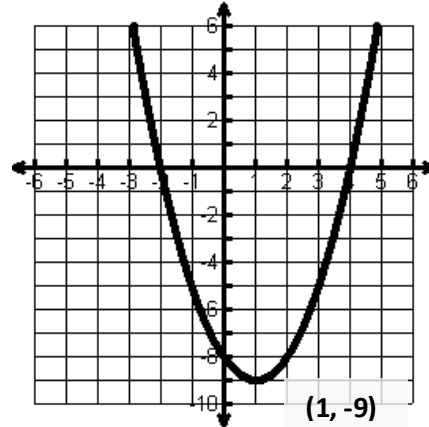
2.  $f(x) = x^2 - 2x - 8$

Rel. Max: \_\_\_\_\_ Rel. Min: \_\_\_\_\_

Abs. Max: \_\_\_\_\_ Abs. Min: \_\_\_\_\_

Inc: \_\_\_\_\_ Dec: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_



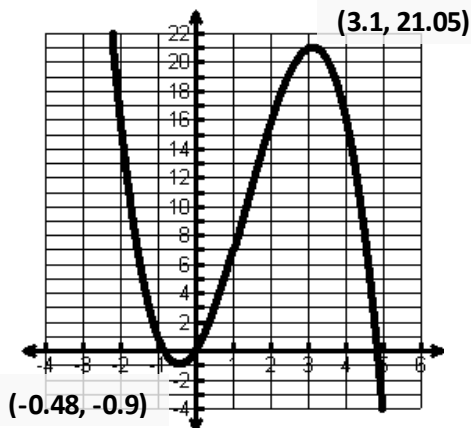
3.  $f(x) = -x^3 + 4x^2 + 4x$

Rel. Max: \_\_\_\_\_ Rel. Min: \_\_\_\_\_

Abs. Max: \_\_\_\_\_ Abs. Min: \_\_\_\_\_

Inc: \_\_\_\_\_ Dec: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_



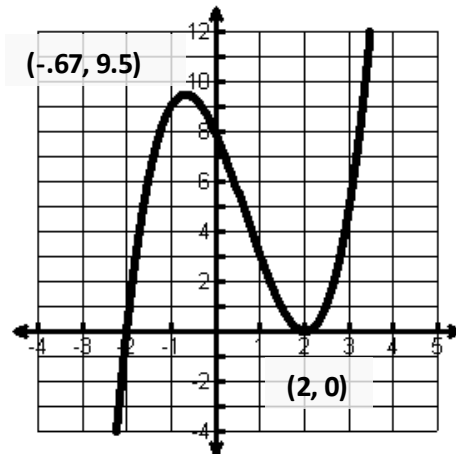
4.  $f(x) = x^3 - 2x^2 - 4x + 8$

Rel. Max: \_\_\_\_\_ Rel. Min: \_\_\_\_\_

Abs. Max: \_\_\_\_\_ Abs. Min: \_\_\_\_\_

Inc: \_\_\_\_\_ Dec: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_



Name: \_\_\_\_\_

Date: \_\_\_\_\_

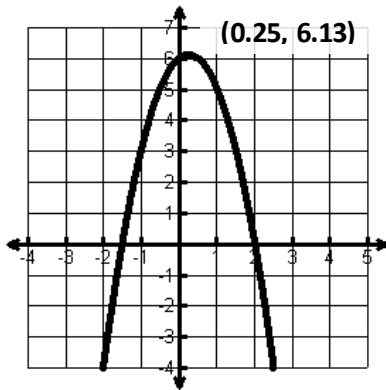
5.  $f(x) = -2x^2 + x + 6$

Rel. Max: \_\_\_\_\_ Rel. Min: \_\_\_\_\_

Abs. Max: \_\_\_\_\_ Abs. Min: \_\_\_\_\_

Inc: \_\_\_\_\_ Dec: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_



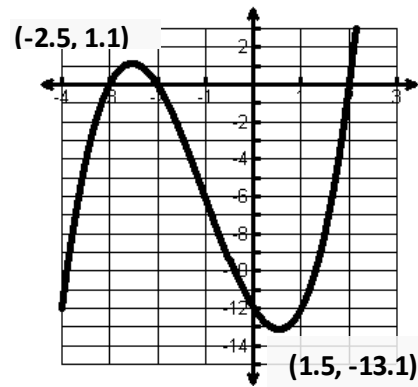
6.  $f(x) = x^3 + 3x^2 - 4x - 12$

Rel. Max: \_\_\_\_\_ Rel. Min: \_\_\_\_\_

Abs. Max: \_\_\_\_\_ Abs. Min: \_\_\_\_\_

Inc: \_\_\_\_\_ Dec: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_



Identify the **y-intercept** and the **# of zeros**

7.  $f(x) = x^3 - 16$

Y-Int: \_\_\_\_\_ # of Zeros: \_\_\_\_\_

8.  $f(x) = x^2 + x - 1$

Y-Int: \_\_\_\_\_ # of Zeros: \_\_\_\_\_

9.  $f(x) = 9x^4 + x^3 - 3x - 10$

Y-Int: \_\_\_\_\_ # of Zeros: \_\_\_\_\_

10.  $f(x) = x^3 - x - 2$

Y-Int: \_\_\_\_\_ # of Zeros: \_\_\_\_\_

11.  $f(x) = 7x$

Y-Int: \_\_\_\_\_ # of Zeros: \_\_\_\_\_

12.  $f(x) = -2x^3 + 7$

Y-Int: \_\_\_\_\_ # of Zeros: \_\_\_\_\_