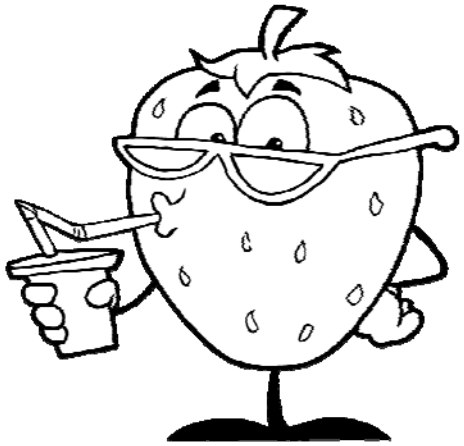
Name _____ Date _____

Graphing Polynomial Functions - Independent Practice Worksheet

Complete all the problems.



1. Sketch the graph $x^3 + 2x - 2$

2. What is the maximum number of turns a graph of this function could make? State the number of real zeros.

$-x^2 + 5x + 2$

3. Sketch the graph $x^3 - x^2 + 5x + 2$

4. What is the maximum number of turns a graph of this function could make? State the number of real zeros.

$X^4 + 3x^3 – 2x + 2$

5. Sketch the graph $x^2 + 4x - 3$

6. Sketch the graph $-x^2 - 6x + 4$

7. What is the maximum number of turns a graph of this function could make? State the number of real zeros.

$2x^4 + 3x^3 – 4x + 5$

8. What is the maximum number of turns a graph of this function could make? State the number of real zeros.

$x^3 - 6x – 3$

9. Sketch the graph $x^2 + 3x + 7$

10. What is the maximum number of turns a graph of this function could make? State the number of real zeros.

$x^2 + 2x – 3$