

***Graded Assignment***

**Unit Test, Part 2: Polynomials and Power Functions**

Answer the questions. When you are finished, submit this assignment to your teacher by the due date for full credit.

**Total score: \_\_\_\_ of 25 points**

***(Score for Question 1: \_\_\_\_ of 8 points)***

Solve the equation  $2x^2 + 10x = 0$ . Check your solution(s) and state the final solution set. Show all your work.

Answer:

*(Score for Question 2: \_\_\_ of 8 points)*

Use successive differences to classify the function represented in the table. Show all your work.

$x$	-2	-1	0	1	2
$h(x)$	14	5	2	5	14

Answer:

**(Score for Question 3: \_\_\_ of 9 points)**

For the function  $f(x) = -2x^4$ , do the following:

- (a) Complete a table of values containing at least five points.
- (b) Sketch the function on the coordinate plane.
- (c) Describe the function's end behavior.

Answer:

$x$	-2	-1	0	1	2
$f(x)$					

