Practice Test

1. Given the polynomial $5x^2 + 6x^4 + 7$

Standard Form:_____

Degree:_____

Number of Terms:_____

Leading Coefficient:_____

Constant:_____

End Behavior:_____

_____

Sketch:

2. Given the polynomial $9 - x$

Standard Form:_____

Degree:_____

Number of Terms:_____

Leading Coefficient:_____

Constant:_____

End Behavior:_____

_____

Sketch:

3. Given the polynomial $2^6 - x^2 + 4x^5$

Standard Form:_____

Degree:_____

Number of Terms:_____

Leading Coefficient:_____

Constant:_____

End Behavior:_____

_____

Sketch:

4. Given the polynomial $3 \cdot 4 - 2x^3$

Standard Form:_____

Degree:_____

Number of Terms:_____

Leading Coefficient:_____

Constant:_____

End Behavior:_____

_____

Sketch:

5. Write a polynomial in standard form that has a degree of three, two terms, a constant of six, and a leading coefficient of negative two.

_____

6. Given the function $f(x) = -x^4 + 3x^2 + 6$

$f(3) = $_____

$f(-2) = $_____

$f(⅓) = $_____

7. Given the function $g(x) = 6 - x^3 + 0.75x$

$g(4) = $_____

$g(-3) = $_____

$g(⅔) = $_____

8. Give three example numbers in the interval 4>x≤7 or write none.

_____

9. Give three example numbers in the interval -9≤x>-6 or write none.

_____
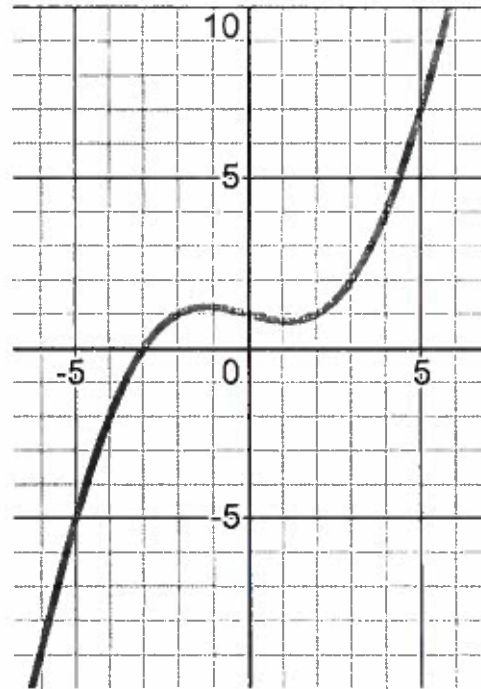
10. Given the graph of $h(x)$

$h(5) =$ _____

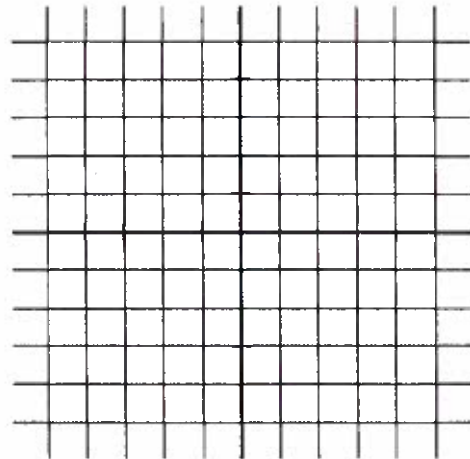$h($ _____ $) =-2$

$h(2) =$ _____

$h($ _____ $) =0$

$h(0) =$ _____

Use inequality notation to describe where the graph is positive: _____

Use inequality notation to describe where the graph is increasing: _____

11. Given the table below, plot the points and connect the dots to reveal the graph.

x	f(x)
4	2
-1	2
-3	4
0	-3
-2	-3

12. Write a linear function f(x) that represents the graph below.

$f(x)=$ _____

$(2.6, 3.14)$

$(3.4, 1.06)$

$(4, -0.5)$