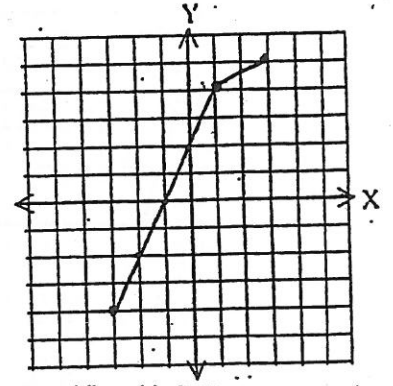
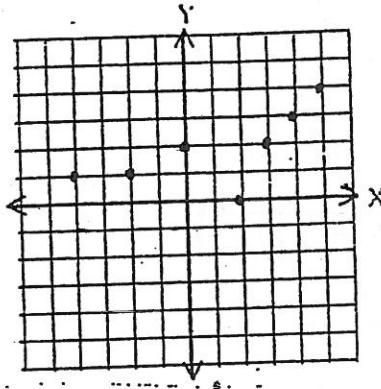
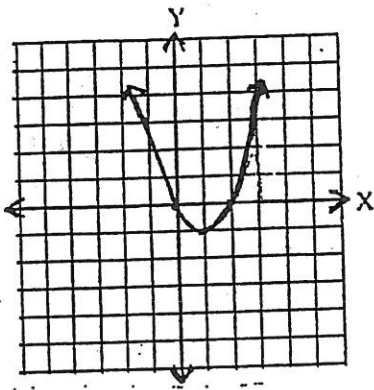


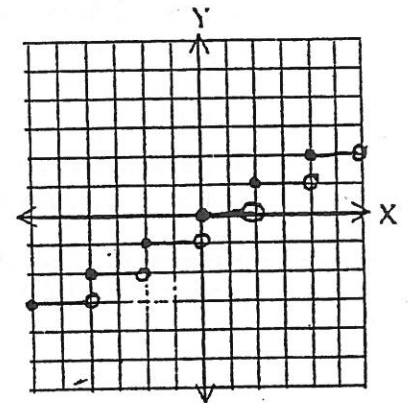
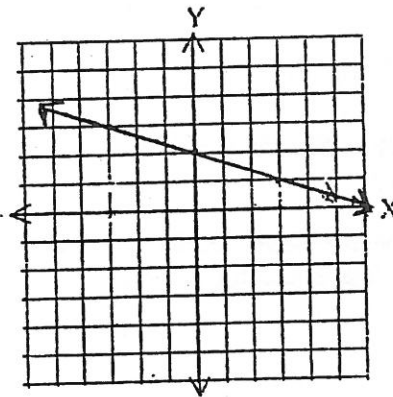
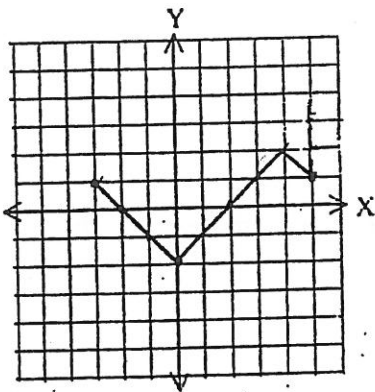
Algebra 2 H Functions Worksheet

Identify: D (domain), R (range), $f(3)$, Z (any zeros) and tell whether it is a 1-1 function. (Yes/No)

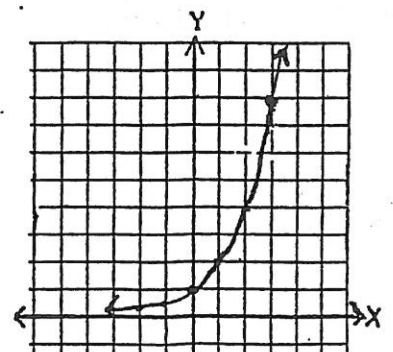
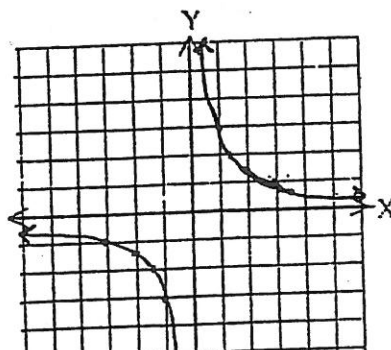
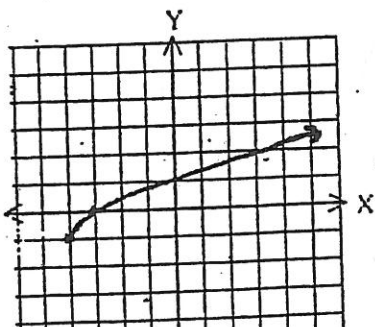
1. D: _____ 2. D: _____ 3. D: _____
 R: _____ R: _____ R: _____
 $f(3)=$ ___ Z: ___ 1-1 ___ $f(3)=$ ___ Z: ___ 1-1 ___ $f(3)=$ ___ Z: ___ 1-1 ___



4. D: _____ 5. D: _____ 6. D: _____
 R: _____ R: _____ R: _____
 $f(3)=$ ___ Z: ___ 1-1 ___ $f(3)=$ ___ Z: ___ 1-1 ___ $f(3)=$ ___ Z: ___ 1-1 ___



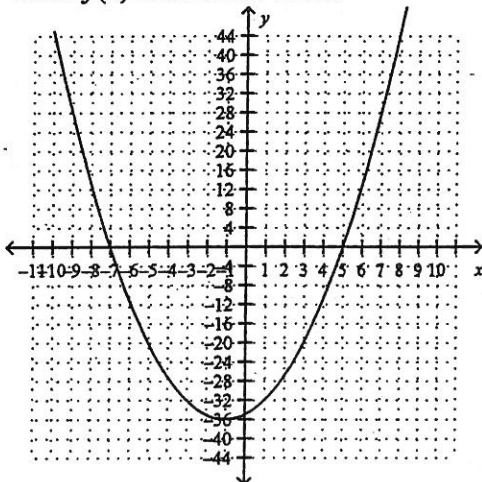
7. D: _____ 8. D: _____ 9. D: _____
 R: _____ R: _____ R: _____
 $f(3)=$ ___ Z: ___ 1-1 ___ $f(3)=$ ___ Z: ___ 1-1 ___ $f(3)=$ ___ Z: ___ 1-1 ___



Multiple Representations

Short Answer

1. Write $f(x)$ in factored form:



2. Given two functions: $f(x) = -x^2 + 3x$
 $g(x) = -4x + 3$

Answer the following:

- Find $f(-1)$.
 - Which is greater $f(2)$ or $g(0.5)$?
 - When is $f(x) = 0$?
 - Calculate the product of $f(2)$ and $g(-3)$.
 - List the value of $g(f(2))$.
3. Write the equation of the line perpendicular to the line determined by the points in the given table and passing through $(-2, 1)$. Use point-slope form.

x	y
-8	15
-4	9
-2	6
-1	4.5
0	3
1	1.5
2	0
4	-3
8	-9