

Assignment #2-1

Secondary 3 Honors

PreCalculus Book:

Pg. 99 5, 9, 12, 18, 21, 24, 30 (answer in vertex form), 31 (answer in vertex form), 39, 40, 45, 46, 55 (use your calculator)

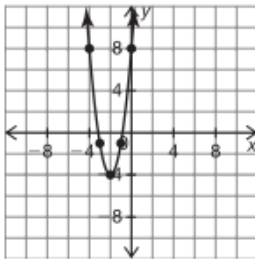
Carnegie Book: (Please write on this page, tear it out, and turn it in with your assignment.)

Pg. 68 #1

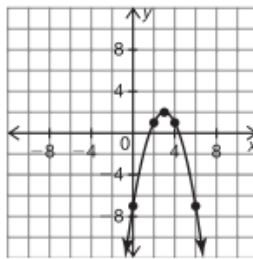
Additional Questions: (Do these problems on a separate sheet of paper.)

1-3: Write an equation for each parabola.

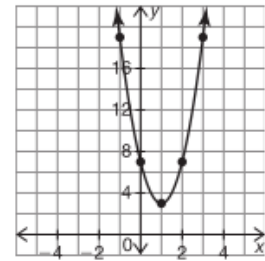
1.



2.



3.



The total revenue R (in dollars) earned by a dog walking service is given by $R(p) = -12p^2 + 150p$ where p is the price charged per dog (in dollars).

- Find the revenue when the price per dog is \$4, \$6, and \$8.
- Find the price that will yield a max revenue.
- What is the max revenue?

7. Write the equation of a line that passes through $(-2, 2)$ and $(3, 7)$.

State the domain for each function:

8. $f(x) = x^2 + 9$

9. $f(x) = \sqrt{x - 7}$

10. $g(x) = \frac{x+5}{x^2-49}$