

PreCalculus
1.4-1.5 Practice Quiz

1. Let $f(x) = x - 7$ and $g(x) = x^2 - 4x + 3$. Evaluate the following.

a) $(g - f)(x)$

b) $(f + g)(4)$

c) $(g \circ f)(x)$

Graph the following functions (be familiar with all parent graphs and graphing in 1.4)

2. $f(x) = |x| + 2$

3. $f(x) = \sqrt{x+1} + 1$

4. $f(x) = -x^3 + 2$

5. $f(x) = \frac{1}{4}(x+3)^2 - 2$

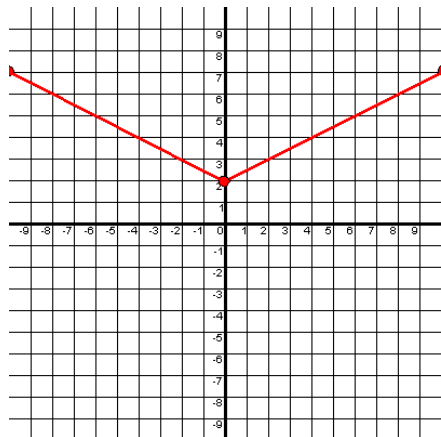
SOLUTIONS

1. a. $(g - f)(x) = (x^2 - 4x + 3) - (x - 7) = x^2 - 5x + 10$

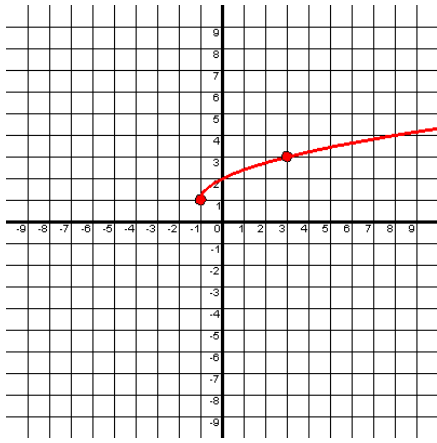
b. $(f + g)(4) = (4 - 7) + (4^2 - 4(4) + 3) = 0$

c. $(g \circ f)(x) = (x - 7)^2 - 4(x - 7) + 3 = x^2 - 18x + 80$

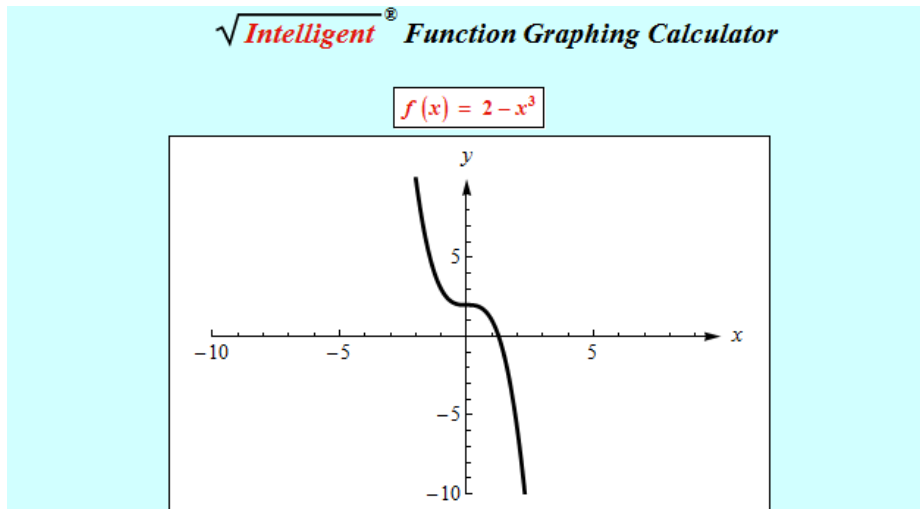
2.



3.



4.



5.

