6.1 Practice Problems

1. $f(x)=2x^2-3x+1$ and $g(x)=x+1$

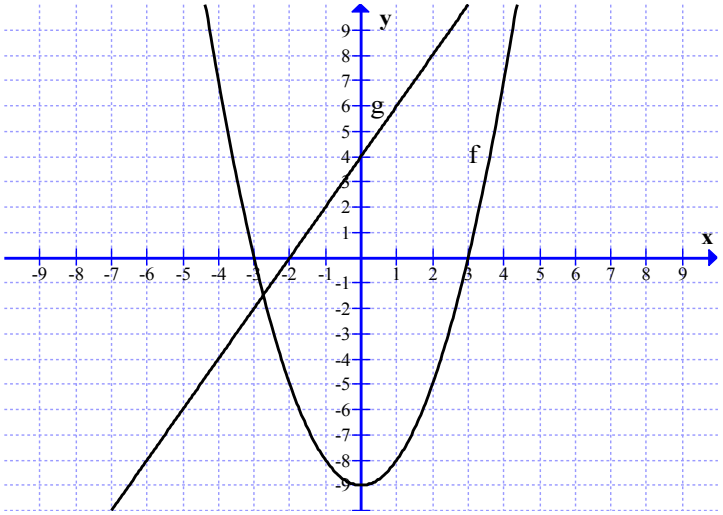
   a. $(f\circ g)(1)$

   b. $(g\circ f)(-2)$

   c. $(f\circ f)(1)$

   d. $(g\circ g)(2)$

2. Use the graph on the right to find the following.



   a. $(f\circ g)(-1)$

   b. $(g\circ f)(3)$

3. Find the composite function and state the domain. $f(x)=2x+3$ And $g(x)=4-5x$

   a. $(f\circ g)(x)$

   b. $(g\circ f)(x)$

4. Find the composite function and state the domain. $f(x)=\frac{1}{x+5}$ And $g(x)=\frac{3}{x-2}$

a. $(f\circ g)(x)$

b. $(g\circ f)(x)$

5. Determine if $(f\circ g)(x)=(g\circ f)(x)$

$f(x)=2x-5$ and $g(x)=\frac{x+5}{2}$

6. Find the functions f and g so that $(f\circ g)(x)=H(x)$

a. $H(x)=(4x-3)^2$

b. $H(x)=\sqrt{x^2+3x-9}$

c. $H(x)=|9-x|$