## Precalculus Book:

Pg. 58-61 3, 7, 9, 14, 19, 25, 31, 37, 40, 46, 61, 77, 84

## Review Problems:

1. Given the functions: $f(x)=\sqrt{x-4} \quad g(x)=x^{2}-3 \quad h(x)=2 x-5$ find the following. Be sure to simply where possible.
a. $\quad(g \circ h)(x)$
b. $\quad(f \circ h)(6)$
c. $\quad f(x)+h(x)$
d. $\quad g(2)-h(-1)$
e. Domain of $f(x)$
f. Domain of $(g \circ f)(x)$
2. Write an equation of a line passing through the points $(-1,-3)(4,7)$.
3. Graph the function $f(x)=3^{x-1}$ by filling in the table and plotting the points.

| $x$ | -2 | -1 | 0 | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $f(x)$ |  |  |  |  |  |  |  |

4. Multiply $f(x)=x-5$ and $g(x)=3 x+1$ to produce $h(x)$. Complete the table of values and then graph each function.

| $x$ | $f(x)=x-5$ | $g(x)=3 x+1$ | $h(x)=f(x) \cdot g(x)$ |
| :--- | :--- | :--- | :--- |
| -3 |  |  |  |
| -2 |  |  |  |
| -1 |  |  |  |
| 0 |  |  |  |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |



