

ID: _____

1. (SECTION 2.6): Sketch the graph of $y = \sqrt{x-5}$, not by plotting points, but by starting with a known graph of a standard function and apply transformations.
2. (SECTION 2.6): Sketch the graph of $y = -\sqrt{x-5}$, not by plotting points, but by starting with a known graph of a standard function and apply transformations.
3. (SECTION 2.6): Sketch the graph of $y = 10 - \sqrt{x-5}$, not by plotting points, but by starting with a known graph of a standard function and apply transformations.
4. (SECTION 2.7): Find $(f \circ g)(x)$ when $f(x) = 8x - 7$ and $g(x) = x^2 + 2$.
4. _____
5. (SECTION 2.7): Evaluate $g(f(16))$ when $f(x) = \frac{1}{\sqrt{x}}$ and $g(x) = x^2 - 6x$.
5. _____
6. (SECTION 2.8): Find $f^{-1}(74)$ when $f(x) = 9x^3 + 2$.

6. _____

7. (SECTION 2.8): Find the inverse function of f when $f(x) = 25 - x^2, x \geq 0$.

7. _____

8. (SECTION 3.1) Sketch the graph of $g(x) = -\frac{1}{2}x^2 - 4x + 10$. You must label the vertex on your graph.

9. (SECTION 3.1): Find the range of $f(x) = 3x^2 + 6x - 3$

9. _____

10. (SECTION 3.1): Find all intercepts and local maximums and local minimums of $f(x) = x^2 + 6x$.

10. _____

11. (SECTION 3.2): Sketch the graph of $g(x) = \frac{3}{2}x^6 - 3x^4$. Describe its end behavior.

12. (SECTION 3.2): Sketch the graph of $y = -x^3 + 5x^2$. Describe its end behavior.