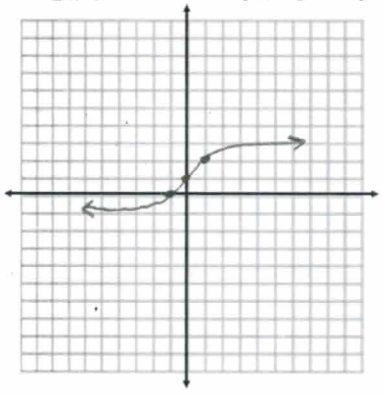
Honors Algebra 2 & Trig
6.3 Day 2 Worksheet

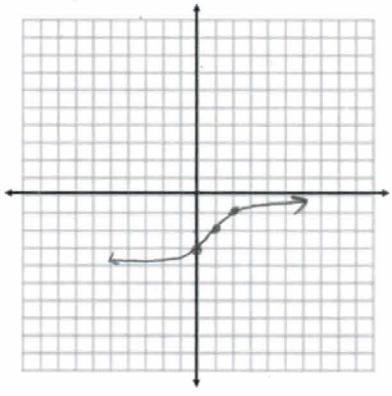
Name Key

Describe the transformations and graph each function. List the domain and range of each function.

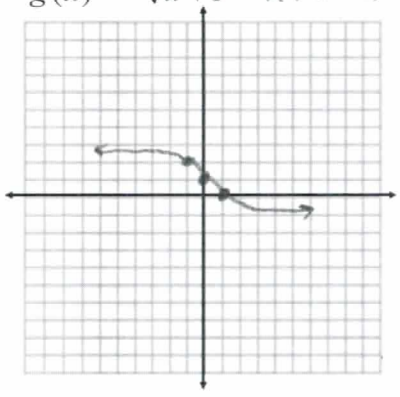
1. $g(x) = 1 + \sqrt[3]{x}$ ↑1 D: $(-\infty, \infty)$ R: $(-\infty, \infty)$



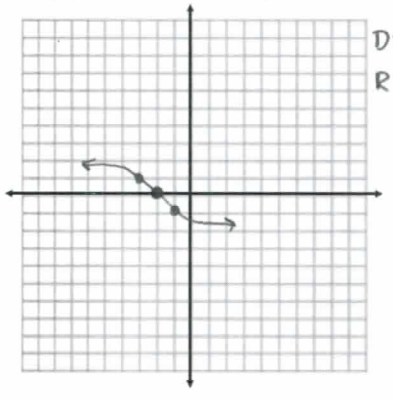
2. $g(x) = \sqrt[3]{x-1} - 2$ ↓2 → 1 D: $(-\infty, \infty)$ R: $(-\infty, \infty)$



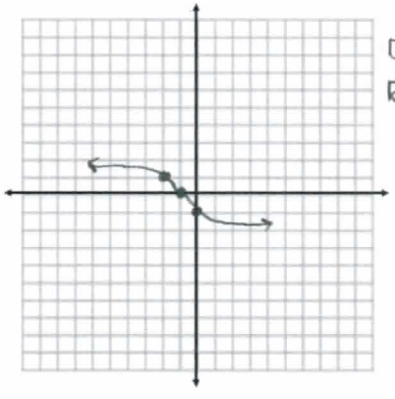
3. $g(x) = -\sqrt[3]{x} + 1$ reflect over x, ↑1 D: $(-\infty, \infty)$ R: $(-\infty, \infty)$



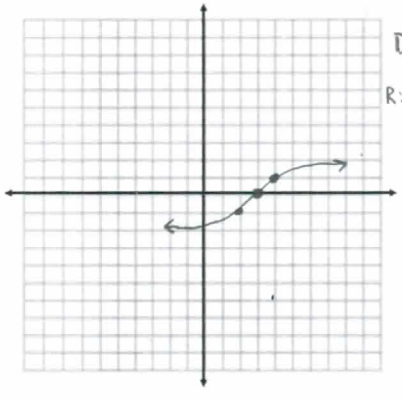
4. $h(x) = \sqrt[3]{-x-2}$ reflect over y, ← 2 $\sqrt[3]{-(x+2)}$ D: $(-\infty, \infty)$ R: $(-\infty, \infty)$



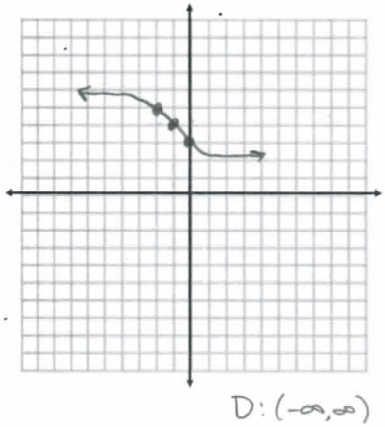
5. $h(x) = -\sqrt[3]{x+1}$ reflect over x ← 1 D: $(-\infty, \infty)$ R: $(-\infty, \infty)$



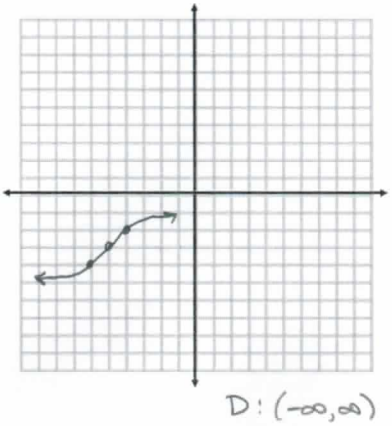
6. $f(x) = -\sqrt[3]{-x+3}$ reflect over x, y → 3 $-\sqrt[3]{-(x-3)}$ D: $(-\infty, \infty)$ R: $(-\infty, \infty)$



7. $f(x) = \sqrt[3]{-x-1} + 4$ reflect y, ← 1, ↑4 $\sqrt[3]{-(x+1)} + 4$ D: $(-\infty, \infty)$ R: $(-\infty, \infty)$



8. $h(x) = \sqrt[3]{x+5} - 3$ ← 5, ↓3 D: $(-\infty, \infty)$ R: $(-\infty, \infty)$



9. $k(x) = -\sqrt[3]{x} - 2$ reflect over x ↓2 D: $(-\infty, \infty)$ R: $(-\infty, \infty)$