Remote Assessment 6.2

1. Identify the toolkit functions (name of function) whose domain is not $(-\infty, \infty)$.

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2. Name the toolkit functions that are bounded

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3. Name the toolkit functions for which this is true: $\lim_{x \to -\infty} f(x) = 0$

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4. Write the resulting function if $f(x) = x^3 - x^2 + 1$ is horizontally shrunk by $\frac{1}{3}$

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5. Write the resulting function if $f(x) = \sqrt{x - 5}$ is shifted right 2, vertically stretched by 3 and reflected over the x-axis.

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6. Using the function in question #5, write the resulting function if f is reflected over the y-axis and shifted down 2

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7. Write the resulting function if a reciprocal function is shifted 4 to the left, reflected over the x-axis and moved up 2

Graph the following using at least 3 anchors. Identify shifts and translations

8. $f(x) = -2(x - 2)^3 + 1$
9. $f(x) = \left|\frac{x}{2}\right| - 3$
10. $f(x) = \sqrt{2x - 4}$