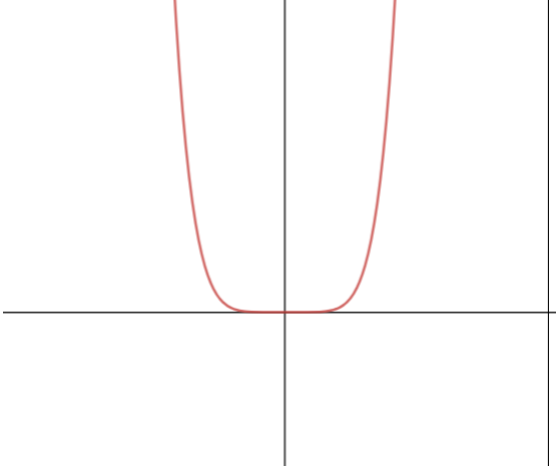
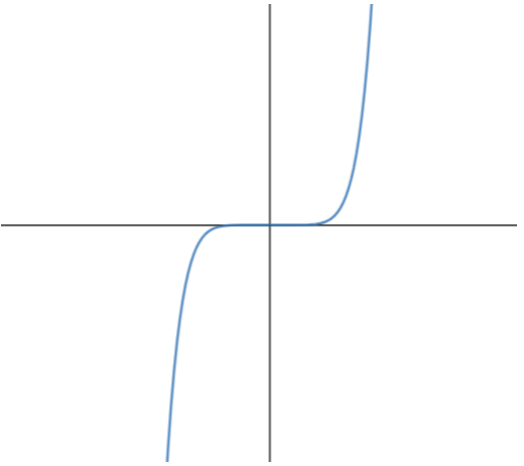
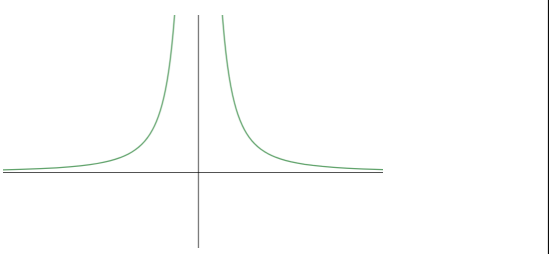



Classifying Power Functions:

|              | $p$ even   | $p$ odd  |
|--------------|--|--|
| $p > 0$      |  |  |
| Examples     |  |  |
| End Behavior | as $x \rightarrow \infty$ , $x^p \rightarrow$ _____  | as $x \rightarrow \infty$ , $x^p \rightarrow$ _____  |
|              | as $x \rightarrow -\infty$ , $x^p \rightarrow$ _____ | as $x \rightarrow -\infty$ , $x^p \rightarrow$ _____ |
| $p < 0$      |  |  |
| Examples     |  |  |
| End Behavior | as $x \rightarrow \infty$ , $x^p \rightarrow$ _____  | as $x \rightarrow \infty$ , $x^p \rightarrow$ _____  |
|              | as $x \rightarrow -\infty$ , $x^p \rightarrow$ _____ | as $x \rightarrow -\infty$ , $x^p \rightarrow$ _____ |

Classifying Power Functions:

|              | $p$ even  | $p$ odd  |
|--------------|---|--|
| $p > 0$      |    |    |
| Examples     | $x^2, x^4, x^{10}, x^{100}$   | $x^3, x^5, x^{55}, x^{201}$  |
| End Behavior | as $x \rightarrow \infty, x^p \rightarrow \infty$                                   | as $x \rightarrow \infty, x^p \rightarrow \infty$                                    |
|              | as $x \rightarrow -\infty, x^p \rightarrow \infty$                                  | as $x \rightarrow -\infty, x^p \rightarrow -\infty$                                  |
| $p < 0$      |  |  |
| Examples     | $\frac{1}{x^2}, \frac{1}{x^4}, \frac{1}{x^{10}}$                                    | $\frac{1}{x^3}, \frac{1}{x^5}, \frac{1}{x^{55}}$                                     |
| End Behavior | as $x \rightarrow \infty, x^p \rightarrow 0$  | as $x \rightarrow \infty, x^p \rightarrow 0$   |
|              | as $x \rightarrow -\infty, x^p \rightarrow 0$                                       | as $x \rightarrow -\infty, x^p \rightarrow 0$  |