

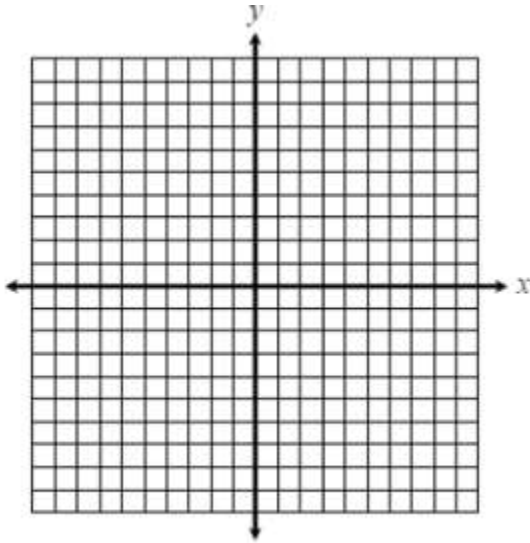
Name: _____

Algebra II

Sketching Polynomial Functions Practice

Together:

$$x^3 + 2x^2 - 8x$$



Domain: _____

Range: _____

Rel. Maximum(s): _____

Rel. Minimum(s): _____

End Behavior: As $x \rightarrow \infty$, $f(x) \rightarrow$ _____

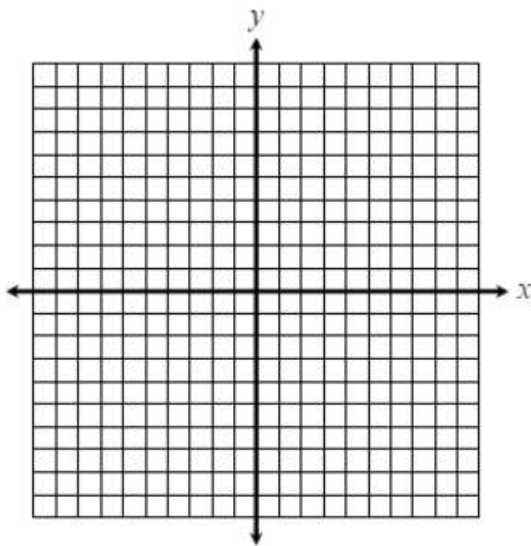
As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

Inc. Intervals: _____

Dec. Intervals: _____

Your Turn:

$$f(x) = 2x^3 - 4x^2 - x$$



Domain: _____

Range: _____

Rel. Maximum(s): _____

Rel. Minimum(s): _____

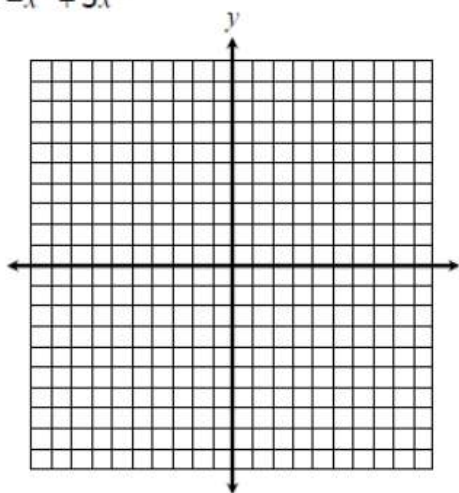
End Behavior: As $x \rightarrow \infty$, $f(x) \rightarrow$ _____

As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

Inc. Intervals: _____

Dec. Intervals: _____

$$f(x) = -x^3 + 3x^2$$



Domain: _____

Range: _____

Rel. Maximum(s): _____

Rel. Minimum(s): _____

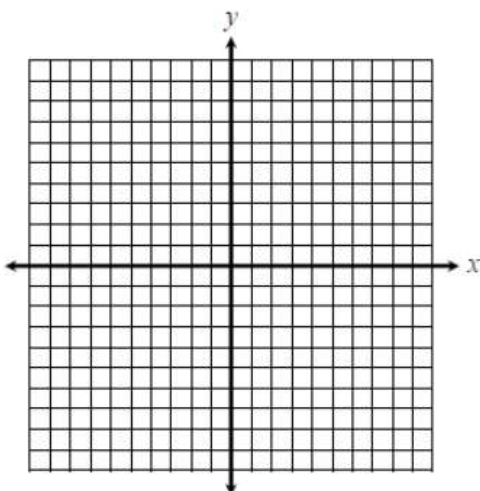
End Behavior: As $x \rightarrow \infty$, $f(x) \rightarrow$ _____

As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

Inc. Intervals: _____

Dec. Intervals: _____

$$f(x) = x^4 + x^3 - 4x^2 + 5$$



Domain: _____

Range: _____

Rel. Maximum(s): _____

Rel. Minimum(s): _____

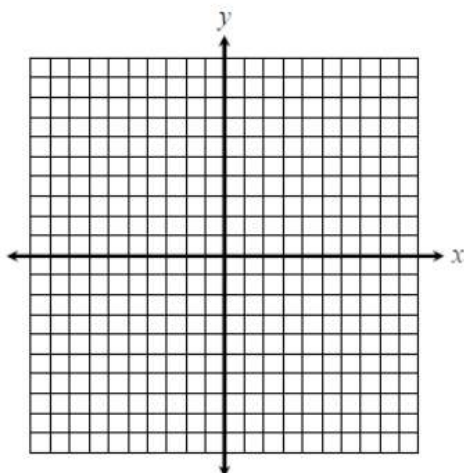
End Behavior: As $x \rightarrow \infty$, $f(x) \rightarrow$ _____

As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

Inc. Intervals: _____

Dec. Intervals: _____

$$f(x) = -x^4 + 4x^2 - 3x - 2$$



Domain: _____

Range: _____

Rel. Maximum(s): _____

Rel. Minimum(s): _____

End Behavior: As $x \rightarrow \infty$, $f(x) \rightarrow$ _____

As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

Inc. Intervals: _____

Dec. Intervals: _____