15-1. Identify \((-11 + h)^2\)

15-2. Identify the coefficient of the constant term of \((+5 + h)^2\)

15-3. Identify the coefficient of the linear term of \((-4 + h)^2\)

15-4. Identify the coefficient of the quadratic term of \((+12 + h)^2\)

15-5. Identify \((-4 + h)^3\)

15-6. Identify the coefficient of the constant term of \((+12 + h)^3\)
15-7. Identify the coefficient of the \textit{linear term} of $(+8 + h)^3$

15-8. Identify the coefficient of the \textit{quadratic term} of $(+7 + h)^3$

15-9. Identify the coefficient of the \textit{cubic term} of $(-5 + h)^3$

15-10. Let $f$ be the function specified by the global input-output rule

\[
x \xrightarrow{f} f(x) = \frac{x - 6}{x^3 + 8}
\]

find the approximate local input-output rule of $f$ near $\infty$ that will give Concavity-sign.

15-11. Let $f$ be the function specified by the global input-output rule

\[
x \xrightarrow{f} f(x) = \frac{(x - 6)^3}{x^3 + 8}
\]

find the approximate local input-output rule of $f$ near $\infty$ that will give Concavity-sign.

15-12. Let $f$ be the function specified by the global input-output rule

\[
x \xrightarrow{f} f(x) = \frac{(x + 5)^3}{x^2 - 9}
\]

find the approximate local input-output rule of $f$ near $\infty$ that will give Concavity-sign.