II-1. Given the affine function $HERB$ such that $HERB(-1) = +5$ and $HERB(+3) = +15$

\[
\begin{aligned}
\text{AND} & \begin{cases} 
\text{Height } HERB \mid_{-1} = +5 \\
\text{Height } HERB \mid_{+3} = +15 
\end{cases} 
\end{aligned}
\]

find Slope $HERB$, that is the slope of the global graph that specifies $HERB$.

II-2. Given that the function $DONA$ is affine and given the boundary value conditions:

\[
\begin{aligned}
\text{AND} & \begin{cases} 
DONA(x) \mid_{x←+4} = -1 \\
DONA(x) \mid_{x←-2} = +2 
\end{cases} 
\end{aligned}
\]

find the global input-output rule that specifies $DONA$.

II-3. Given the affine function $JADIH$ whose global rule is

\[
x \xrightarrow{JADIH} JADIH(x) = -\frac{2}{3}x + 3
\]

find its global graph.

II-4. Given the function $CRIC$ whose global input-output rule is

\[
x \xrightarrow{CRIC} CRIC(x) = -3x - 12
\]

find its 0-height input(s) if any.

II-5. Given the function $FILO$ whose global input-output rule is

\[
x \xrightarrow{FILO} FILO(x) = +8x + 1
\]

and the function $GREG$ whose global input-output rule is

\[
x \xrightarrow{GREG} GREG(x) = +5x - 2
\]

find the inputs, if any, for which $FILO(x) < GREG(x)$. 
II-6. Given the function $MARC$ specified by the global input-output rule
\[ x \xrightarrow{MARC} MARC(x) = +3x^2 + 6x - 17 \]
find Slope-sign near $\infty$.

II-7. Given the function $MAY$ specified by the global input-output rule
\[ x \xrightarrow{MAY} MAYO(x) = -2x^2 + 4x + 6 \]
find Height-sign near $\infty$.

II-8. Let the function $f$ be specified by the global input-output rule
\[ x \xrightarrow{RONI} RONI(x) = +3x^2 + 9x + 6 \]
for which input(s), if any, is the output of $f$ equal to 0?

II-9. Let the function $f$ be specified by the global input-output rule
\[ x \xrightarrow{f} f(x) = -3x^2 + 7x - 6 \]
where, if at all, is the output of $f$ negative?

II-10. Given the function $TINA$ whose global input-output rule is
\[ x \xrightarrow{TINA} TINA(x) = -2x^2 + 6x + 8 \]
find $x_{0\text{-slope}}$.

II-11. Let $f$ be the function specified by the global input-output rule
\[ x \xrightarrow{f} f(x) = -4x^2 + 8x + 12 \]
near which input(s), if any, is the output of $f$ decreasing?

II-12. Let $f$ be the function specified by the global input-output rule
\[ x \xrightarrow{f} f(x) = -26.06x^2 + 13.03x - 21.63 \]
for which input(s), if any, is Concavity-sign $f = (\cup, \cup)$?
II-13. Let \( f \) be the function specified by the global input-output rule
\[
x \overset{f}{\rightarrow} f(x) = +x^2 - 2x + 8
\]
and let \( g \) be the function specified by the global input-output rule
\[
x \overset{g}{\rightarrow} g(x) = -3x + 7
\]
for how many input(s), if any, do the functions \( f \) and \( g \) return the same output?

II-14. Given the function \( TITO \) whose global input-output rule is
\[
x \overset{TITO}{\rightarrow} TITO(x) = +3x^2 + 9x + 6
\]
what is the highest output(s), if any?.

II-15. Given the function \( f \) whose global input-output rule is
\[
x \overset{f}{\rightarrow} f(x) = x^3 - 12x^2 + 45x + 10
\]
what is Slope-sign \( f \) near +3?

II-16. Given the function \( f \) whose global input-output rule is
\[
x \overset{f}{\rightarrow} f(x) = -2x^3 + 12x^2 + 8x - 7
\]
what is Concavity-sign \( f \) near +3?

II-17. Given the function \( f \) whose global input-output rule is
\[
x \overset{f}{\rightarrow} f(x) = x(x - 2)^2
\]
where is the output equal to 0?

II-18. Given the function \( f \) whose global input-output rule is
\[
x \overset{f}{\rightarrow} f(x) = -(x - 1)(x - 2)(x - 3)
\]
where is the output of \( f \) negative?

II-19. Let \( f \) be the function specified by the global input-output rule
\[
x \overset{f}{\rightarrow} f(x) = +2x^3 + x^2 + 10x + 7
\]
where is the slope of \( f \) equal to 0?.

II-20. Given the function \( f \) specified by the global input-output rule
\[
x \overset{f}{\rightarrow} f(x) = +x^3 - 9x^2 + 15x - 11
\]
where is \( f \) concave up?