Problem 1: Convert the following inequalities to interval notation:

a. \( x < 0 \)

b. \( x \geq -5 \)

c. \( -3 \leq x < 7 \)

Problem 2: Graph the following function by plotting points using the given values for \( x \). Be sure to use an appropriate scale on the graph.

\[ h(x) = x^3 + 2 \]
\[ x = -2, -1, 0, 1, 2 \]

\[ h(-2) = \text{_____} \quad h(-1) = \text{_____} \quad h(0) = \text{_____} \quad h(1) = \text{_____} \quad h(2) = \text{_____} \]
Problem 3: Use the following graph to find the domain, range, $x$-intercepts (if any), and $y$-intercepts (if any). Write the domain and range in interval notation.

[Graph]

Domain: ________________  Range: ________________

$x$-intercepts: ________________  $y$-intercept: ________________

Problem 4: Use the following graph to find the domain, range, $x$-intercepts (if any), and $y$-intercepts (if any). Write the domain and range in interval notation.

[Graph]

Domain: ________________  Range: ________________

$x$-intercepts: ________________  $y$-intercept: ________________
**Problem 5:** Use the following graph to find the domain, range, \(x\)-intercepts (if any), and \(y\)-intercepts (if any). Write the domain and range in interval notation.

\[
\text{Domain : } \quad \text{Range : } \\
\text{\(x\)-intercepts : } \quad \text{\(y\)-intercept : }
\]

**Problem 6:** Use the following graph to find the domain, range, \(x\)-intercepts (if any), and \(y\)-intercepts (if any). Write the domain and range in interval notation.

\[
\text{Domain : } \quad \text{Range : } \\
\text{\(x\)-intercepts : } \quad \text{\(y\)-intercept : }
\]