PROBLEMS AND SOLUTIONS - POLYNOMIAL AND RATIONAL INEQUALITIES
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Please Send Questions and Comments to ingrid.stewart@csn.edu. Thank you!

PLEASE NOTE THAT YOU CANNOT ALWAYS USE A CALCULATOR ON THE ACCUPLACER - COLLEGE-LEVEL MATHEMATICS TEST! YOU MUST BE ABLE TO DO SOME PROBLEMS WITHOUT A CALCULATOR!

Problem 1:
Find the solution set for \( x^2 - 2x > 8 \) in Interval Notation.

Problem 2:
Find the solution set for \( x^2 - 9 < 0 \) in Interval Notation.

Problem 3:
Find the solution set for \( 2x^3 \geq -16x^2 - 30x \) in Interval Notation.

Problem 4:
Find the domain of the function \( y = x^2 \sqrt{9 - x^2} \) in Interval Notation.

Problem 5:
Find the solution set for \( \frac{5}{x-2} < \frac{17-x}{2x-4} \) in Interval Notation.

Problem 6:
Find the solution set for \( \frac{x}{x+3} \geq 0 \) in Interval Notation.
SOLUTIONS
You can find detailed solutions below the link for this problem set!

<table>
<thead>
<tr>
<th></th>
<th>(−∞,−2) ∪ (4, ∞)</th>
<th>(-3, 3)</th>
<th>[−5,−3] ∪ [0, ∞)</th>
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<td>1</td>
<td>[−3,3]</td>
<td>(2,7)</td>
<td>(−∞,−3) ∪ [0, ∞)</td>
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