

Advanced Algebra  
Solving Polynomial Inequalities – Homework

*Solve each of the following polynomial inequalities over the set of real numbers. Write your answers using interval notation.*

1)  $(x - 2)(x + 3)(x + 5) < 0$

2)  $2x(x + 2)(x - 4) \geq 0$

3)  $(x - 1)^2(x - 3)(x - 6) \leq 0$

4)  $x^3 + 5x^2 - x - 5 > 0$

5)  $-2x^4 - 10x^3 + 8x^2 + 40x$