

## MRS21 Homework 41

In 1 – 6, solve each inequality and graph its solution set on a number line. State the solution set using INTERVAL NOTATION.

1.  $4 \leq 2x < 8$

2.  $(2m \geq -2) \wedge (-3m > -1)$

3.  $5 \leq \frac{x}{3} + 5 < 6$

4.  $(3(x - 2) < 9) \vee (3(x - 2) > 15)$

5.  $2x - 3 < 5 \leq 2 - 3x$

6.  $(2x - 2 < -2) \vee (3(x + 5) > 2x + 15)$

7. Determine the sum and the product of the roots of the equation  
 $3x^2 = 11x - 6$

8. Solve algebraically for all values of  $x$ :  $x^4 + 4x^3 + 4x^2 = -16x$