Precalculus Algebra Review Worksheet #13 page 1 _____

Solve each of the following quadratic inequalities. Represent the solution set as an interval or as the union of intervals. (Express irrational numbers rounded to two significant digits.)

1.
$$15x^2 - 4x - 3 > 0$$

$$2. \qquad 8x^2 + 15x + 7 \ge 0$$

3.
$$x^2 + 3x - 1 < 0$$

4.
$$(2x-3)^2 \le (x+3)^2$$

5.
$$5x(3x-1)-2(x-3) > 8$$

6.
$$5(4x-7) \ge 3x(x-2)$$

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Solve each of the following quadratic inequalities. Represent the solution set as an interval or as the union of intervals. (Express irrational numbers rounded to two significant digits.)

7.
$$x^2 - 2x + 5 < 0$$

8.
$$x^2 + 3x + 4 \le 0$$

9.
$$x^2 + (2x + 1)^2 > (3x - 1)^2$$

10.
$$1-3x(2x-3) \le 2x-8(x+1)$$