Rational Inequalities

Name: _____ Date: ____ Score: ____

Direction: Solve each rational inequality. Express the answer in interval notation. Show all your work in the space provided.

$$1) \quad \frac{x+3}{x-2} \ge 0$$

$$2) \quad \frac{x^2 - 5x - 14}{x + 1} > 0$$

$$3) \quad \frac{x+2}{x^2-6x+9} < 0$$

4)
$$\frac{x^2 - 1}{x^2 - 4} \le 0$$

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$$1) \quad \frac{x+3}{x-2} \ge 0$$

2)
$$\frac{x^2 - 5x - 14}{x + 1} > 0$$
 $(-2, -1) \cup (7, \infty)$

$$(-\infty, -3] \cup (2, \infty)$$

$$(-2,-1)\cup(7,\infty)$$

3)
$$\frac{x+2}{x^2-6x+9} < 0$$

4)
$$\frac{x^2-1}{x^2-4} \le 0$$

$$(-\infty, -2)$$

$$(-2,-1] \cup [1,2)$$