

EXAMPLE 6 Solving a Rational Inequality
by Combining Fractions

Solve $\frac{5}{x+3} + \frac{3}{x-1} < 0$.

EXAMPLE 7 Solving an Inequality Involving a Radical

Solve $(x - 3)\sqrt{x + 1} \geq 0$.

EXAMPLE 8 Solving an Inequality Involving Absolute Value

Solve $\frac{x - 2}{|x + 3|} \leq 0$.

EXAMPLE 9 **Designing a Box—Revisited**

Dixie Packaging Company has contracted with another firm to design boxes with a volume of *at least* 600 in.^3 . Squares are still to be cut from the corners of a 20-in. by 25-in. piece of cardboard, with the flaps folded up to make an open box. What size squares should be cut from the cardboard?