**1.8 Absolute Value Equations and Inequalities**

**Absolute Value Equations**

**CLASSROOM EXAMPLE 1 Solving Absolute Value Equations (Case 1 and the Special Case **

Solve each equation.

(a) 

**Absolute Value Inequalities**

**CLASSROOM EXAMPLE 2 Solving Absolute Value Inequalities (Cases 2 and 3)**

Solve each inequality.

(a)  (b) 

**CLASSROOM EXAMPLE 3 Solving an Absolute Value Inequality (Case 3)**

Solve 

**Special Cases**

The three cases given in this section require the constant *k* to be positive. ***When***  ***use the fact that the absolute value of any expression must be nonnegative, and consider the conditions necessary for the statement to be true.***

**CLASSROOM EXAMPLE 4 Solving Special Cases**

Solve each equation or inequality.

**(a) **

**(b) **

**(c) **