Ch.1-6 - Solving Linear Inequalities

Skills

- 1-6a - Solve and graph the solution set to a linear inequality.
- 1-6b - Applications of linear inequalities.

Introduction

Principles for Solving Inequalities

For any real numbers a, b, and c:

The Addition Principle for Inequalities:

If $a < b$ is true, then $a + c < b + c$ is true.

The Multiplication Principle for Inequalities:

a) If $a < b$ and $c > 0$ are true, then $ac < bc$ is true.

b) If $a < b$ and $c < 0$ are true, then $ac > bc$ is true.
(When both sides of an inequality are multiplied by a negative number, the inequality sign must be reversed.)

Similar statements hold for $a \leq b$.

Example 1	1)	3)

Example 2	17)
Example 3	29)

Example 4	3)

Ch.1-6 - EXTRA PRACTICE

Extra Practice for 1.6a on p.142 #1-16, 17-36 - Follow the instructions in the book and complete the problems.

Extra Practice for 1.6b on p.142 #37-46 - Follow the instructions in the book and complete the problems.

IXL PRACTICE

IXL - A1-F.1-Graph inequalities

Date				Final
Grade				
Initials				

IXL - F.2-Write inequalities from graphs

Date				Final
Grade				
Initials				

IXL - A1-F.3-Identify solutions to inequalities

Date				Final
Grade				
Initials				

IXL - F.4-Solve one-step linear inequalities: addition and subtraction

Date				Final
Grade				
Initials				

IXL - A1- F.5-Solve one-step linear inequalities: multiplication and division

Date				Final
Grade				
Initials				

IXL - A1-F.6-Solve one-step linear inequalities

Date				Final
Grade				
Initials				

IXL - A1- F.7-Graph solutions to one-step linear inequalities

Date				Final
Grade				
Initials				

IXL - A1-F.8-Solve two-step linear inequalities

Date				Final
Grade				
Initials				

IXL - A1- F.9-Graph solutions to two-step linear inequalities

Date				Final
Grade				
Initials				

IXL - F.10-Solve advanced linear inequalities

Date				Final
Grade				
Initials				

IXL - A1- F.11-Graph solutions to advanced linear inequalities

Date				Final
Grade				
Initials				