

## **PROPERTIES** Objective F

9. Fill in what was done to solve the inequality.

$$5x - 5 > -6x + 13$$

$$21x - 5 > 13$$

$$21x > 18$$

$$x > \frac{18}{21}$$

$$x > \frac{6}{7}$$

## Name

4-5B	pa
<b>10</b> . Consider the inequality $50z + 30 < 68 - 43z$ .	
<b>a.</b> Solve it by first adding 43 <i>z</i> to each side.	
<b>b.</b> Solve it by first adding $-50z$ to each side.	
<b>c.</b> Compare your results for a and b. What does this suggest?	
USES Objective H	
<b>11.</b> Delishus Doings caters events a flat rate of \$500 plus \$100 per l after the first 2 hours. Cathy's Catering has a flat rate of \$620 pe event plus \$70 per hour after the first 3 hours. For how many h of an event would hiring Cathy's Catering cost no more than hi Delishus Doings?	er ours
<b>12.</b> Joe got took out student loans during college, and by the end of college had \$36,000 of debt, interest free. Joe repaid the debt at per year. After his loan was paid off, he began saving \$8,000 a y Joe's college friend Steve had no college debt and started savin \$4,000 per year after college. (In both cases, ignore savings into	t \$8,000 rear. 19
a. In how many years will Joe be out of debt?	
<b>b.</b> Write expressions for the amount of money each man has sa	aved