$\qquad$ Date $\qquad$ Class $\qquad$
TEKS 2A.10.D

## Practice B

LESSON

## Solving Rational Equations and Inequalities

Solve each equation.

1. $x-\frac{6}{x}=5$
2. $\frac{15}{4}=\frac{6}{x}+3$
3. $x=\frac{3}{x}+2$
4. $\frac{4}{x^{2}-4}=\frac{1}{x-2}$

Solve each inequality by using a graphing calculator and a table.
5. $\frac{6}{x+1}<-3$
6. $\frac{x}{x-2} \geq 0$
7. $\frac{2 x}{x+5} \leq 0$
8. $\frac{-x}{x-3} \geq 0$

Solve each inequality algebraically.
9. $\frac{12}{x+4} \leq 4$
11. $\frac{x}{x-2}>9$
10. $\frac{7}{x+3}<-5$
12. $\frac{2 x}{x-5} \geq 3$

## Solve.

13. The time required to deliver and install a computer at a customer's location is $t=4+\frac{d}{r}$, where $t$ is time in hours, $d$ is the distance, in miles, from the warehouse to the customer's location, and $r$ is the average speed of the delivery truck. If it takes 6.2 hours for the employee to deliver and install a computer for a customer located 100 miles from the warehouse, what is the average speed of the delivery truck?
