

## LESSON

**Practice B****8-5****Solving Rational Equations and Inequalities**

Solve each equation.

1.  $x - \frac{6}{x} = 5$

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2.  $\frac{15}{4} = \frac{6}{x} + 3$

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3.  $x = \frac{3}{x} + 2$

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4.  $\frac{4}{x^2 - 4} = \frac{1}{x - 2}$

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Solve each inequality by using a graphing calculator and a table.

5.  $\frac{6}{x + 1} < -3$

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6.  $\frac{x}{x - 2} \geq 0$

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7.  $\frac{2x}{x + 5} \leq 0$

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8.  $\frac{-x}{x - 3} \geq 0$

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Solve each inequality algebraically.

9.  $\frac{12}{x + 4} \leq 4$

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10.  $\frac{7}{x + 3} < -5$

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11.  $\frac{x}{x - 2} > 9$

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12.  $\frac{2x}{x - 5} \geq 3$

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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?

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