Rational Equations

1. Solve each equation and state the solution set. Remember to identify the values of the variable for which the expressions in each rational equation are undefined.
(similar to p.499 #20)

$$\frac{-3}{x-7}=\frac{5}{x+7}$$

2. Solve each equation and state the solution set. Remember to identify the values of the variable for which the expressions in each rational equation are undefined.
(similar to p.499 #22)

$$\frac{2}{x+3}+7=\frac{1}{x+3}$$

3. Solve each equation and state the solution set. Remember to identify the values of the variable for which the expressions in each rational equation are undefined.
(similar to p.499 #28)

$$\frac{5}{x-1}-\frac{2}{x-9}=\frac{10x-2}{x^2-10x+9}$$

4. Solve each equation and state the solution set. Remember to identify the values of the variable for which the expressions in each rational equation are undefined.
(similar to p.499 #40)

$$\frac{-8x+36}{x+3}+x=5$$

5. Solve each equation and state the solution set. Remember to identify the values of the variable for which the expressions in each rational equation are undefined.
(similar to p.499 #42)

$$\frac{3x}{x+5}=\frac{2x+4}{x+4}-\frac{11x+40}{x^2+9x+20}$$

6. Solve each equation and state the solution set. Remember to identify the values of the variable for which the expressions in each rational equation are undefined.
(similar to p.499 #44)

$$\frac{3}{x+6}+\frac{20x-57}{x^2+x-30}=\frac{x}{x-5}$$

7. Solve the equation for the indicated variable.
(similar to p.499 #48)

$$A=\frac{B}{C} \quad for \quad C$$

8. Solve the equation for the indicated variable.
(similar to p.499 #52)

$$A=\frac{2B+3C}{D-4E} \quad for \quad B$$

9. Solve the equation for the indicated variable.
(similar to p.499 #54)

$$A=\frac{B+C}{D+E} \quad for \quad D$$

10. Solve the equation for the indicated variable.
(similar to p.499 #58)

$$\frac{2}{A}=\frac{B}{D}+\frac{E}{F} \quad for \quad F$$

11. Solve the equation for the indicated variable.
(similar to p.500 #64)

$$A=\frac{B+C}{B+D} \quad for \quad B$$