Practice Exercises

A. Determine whether the given value on the left is a solution to the rational equation or not. Write Yes or No.

1. 4;
$$\frac{2}{x} = \frac{6}{12}$$

4.
$$-1$$
; $\frac{2}{x} - \frac{3}{3} = 5$

2.
$$-1$$
; $\frac{-3}{2x} = \frac{9}{6}$

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

1. 4;
$$\frac{2}{x} = \frac{6}{12}$$

2. -1; $\frac{-3}{2x} = \frac{9}{6}$
3. $\frac{1}{9}$; $3x^2 = \frac{1}{27}$

B. Solve each rational equation. If it

has no solution, write "No Solution".

1.
$$\frac{a}{3} = \frac{5}{12}$$

2.
$$\frac{6y}{7} - \frac{y}{2} = 5$$

$$3. \ \frac{1}{x} - \frac{1}{x^2} = \frac{1}{4}$$

4.
$$\frac{x}{10} + \frac{x}{6} - \frac{x}{15} = 1$$

$$5. \ \frac{2}{5} + \frac{2}{y} = 1$$

Problem Set

A. Determine whether the given value on the left is a solution to the rational equation or not. Write *Yes* or *No*.

1. 1;
$$\frac{3x}{5} = \frac{15}{25}$$

$$2. -7; \frac{1}{x^2} = \frac{1}{49}$$

3.
$$\frac{-6}{7}$$
; $\frac{2}{3} + \frac{1}{2} = \frac{1}{x}$

4.
$$\frac{-1}{2}$$
; $\frac{1}{y} + \frac{1}{y^2} = 2$

5.
$$-2$$
; $\frac{2}{x} + \frac{x}{4} = \frac{-3}{2}$

B. Solve each rational equation. If it

has no solution, write "No Solution".

1.
$$\frac{n}{6} - \frac{n}{4} = 9$$

2.
$$\frac{5}{4} - \frac{3}{x} = \frac{1}{2}$$

3.
$$\frac{a+1}{3} = \frac{4}{a}$$

4.
$$\frac{6}{x} + \frac{9}{2x} = 3$$

5.
$$3b - \frac{3}{4} = \frac{2b}{3}$$