Perform the indicated operation. Reduce to lowest terms.

$$\frac{w}{w^2 + 11w + 30} - \frac{5}{w^2 + 9w + 20}$$

The difference is .

11.

Without actually solving the equation, list all possible numbers that would have to be rejected if they appeared as potential solutions.

$$\frac{1}{4x} + \frac{1}{5x} = \frac{x}{4}$$

The solutions cannot include

(Use commas to separate answers. Type N if there are no solutions that must be rejected.)

12.

Solve the following equation for the variable x.

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

Solve the equation for x. The solution set is $\{ [] \}$.

(Simplify your answer.)

13

Solve the following equation for the variable x.

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

The solution is x = [].

(Simplify your answer. Type an integer or a fraction. Type N if there is no solution.)

14.

Solve.

$$\frac{2y}{y-3} - \frac{6}{y+3} = \frac{36}{y^2 - 9}$$

The solution is $y = \Box$.

(Simplify your answer. Type N if there is no solution.)

15

Solve for r.

$$F = \frac{rs^9}{v}$$

The solution is r =