

Homework Section 1.2 Linear Equations and Rational Equations

Read Section 1.1,1.2,1.3, complete the following problems and associated MyMathLab assignments. Show all your work!

Solve and check each linear equation:

1.2.2 $6x - 3 = 63$

1.2.6 $3x + 5 = 2x + 13$

1.2.10 $2(x - 1) + 3 = x - 3(x + 1)$

1.2.11 $3(x - 4) - 4(x - 3) = x + 3 - (x - 2)$

Solve each equation:

1.2.19 $20 - \frac{x}{3} = \frac{x}{2}$

1.2.23 $\frac{3x}{5} - x = \frac{x}{10} - \frac{5}{2}$

1.2.30 $\frac{3x}{5} - \frac{x-3}{2} = \frac{x+2}{3}$

INSTRUCTIONS: For the following questions:

A. Write the value(s) of the variable that make the denominator zero. These are restrictions on the variables

B. Solve the equation. **Note:** Do not forget about the restrictions.

1.2.32 $\frac{5}{x} = \frac{10}{3x} + 4$

1.2.43 $\frac{3}{2x-2} + \frac{1}{2} = \frac{2}{x-1}$

1.2.49 $\frac{1}{x-4} - \frac{5}{x+2} = \frac{6}{x^2-2x-8}$