

MA90 Exercises for section 7.4 Equations Involving Rational Expressions**Numeric Response**

1. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

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

$$x = \underline{\hspace{2cm}}$$

2. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{7}{a} = \frac{1}{7}$$

$$a = \underline{\hspace{2cm}}$$

3. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{5}{x} + 1 = \frac{2}{7}$$

$$x = \underline{\hspace{2cm}}$$

Name: _____

ID: A

4. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{1}{y} - \frac{1}{4} = -\frac{1}{8}$$

$$y = \underline{\hspace{2cm}}$$

5. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

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

$$x = \underline{\hspace{2cm}}$$

Name: _____

ID: A

6. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{8}{x+6} = \frac{8}{9}$$

$$x = \underline{\hspace{2cm}}$$

7. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{a}{6} + \frac{3}{a-3} = \frac{a}{a-3}$$

$$a = \underline{\hspace{2cm}}$$

8. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{42}{y^2-36} = \frac{36}{y^2+6y}$$

$$y = \underline{\hspace{2cm}}$$

Name: _____

ID: A

9. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{2x}{x+2} = \frac{x}{x+5} - \frac{15}{x^2+7x+10}$$

$$x = \underline{\hspace{2cm}}$$

Short Answer

1. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$1 - \frac{7}{x} = \frac{-12}{x^2}$$

$$x = \underline{\hspace{2cm}}$$

Name: _____

ID: A

2. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

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

$x =$ _____

3. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{x}{x-6} + \frac{3}{8} = \frac{6}{x-6}$$

$x =$ _____

Name: _____

ID: A

4. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{5}{x+2} + \frac{2}{x+6} = \frac{-8}{x^2+8x+12}$$

$x =$ _____

5. Solve the following equation. Be sure to check each answer in the original equation if you multiply both sides by an expression that contains the variable.

$$\frac{5x}{x-3} - \frac{4x}{x+1} = \frac{-72}{x^2-2x-3}$$

$x =$ _____

MA90 Exercises for section 7.4 Equations Involving Rational Expressions
Answer Section**NUMERIC RESPONSE**

1. ANS: -6

PTS: 1

2. ANS: 49

PTS: 1

3. ANS: -7

PTS: 1

4. ANS: 8

PTS: 1

5. ANS: 4

PTS: 1

6. ANS: 3

PTS: 1

7. ANS: 6

PTS: 1

8. ANS: -36

PTS: 1

9. ANS: -3

PTS: 1

SHORT ANSWER1. ANS:
3, 4

PTS: 1

2. ANS:
-4, 1

PTS: 1

3. ANS:
no solution

PTS: 1

4. ANS:
no solution

PTS: 1

5. ANS:
-8, -9

PTS: 1