

MasterMath

Solving Rational Equations

Name _____

Date _____

1. Solve for x using Cross Products. There may be either one or two solutions. Check for extraneous solutions and eliminate them.

$$\frac{5}{x} = \frac{x}{20}$$

X =	
X =	

$$\frac{2}{x} = \frac{10}{x - 6}$$

X =	
X =	

$$\frac{x}{2} = \frac{15}{x + 1}$$

X =	
X =	

$$\frac{2x}{x - 3} = \frac{24}{x}$$

X =	
X =	

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

X =	
X =	

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

X =	
X =	

2. Solve for w using LCD. There may be either one or two solutions. Check for extraneous solutions and eliminate them.

$$\frac{5}{w + 4} = \frac{w}{w - 3} + \frac{2w - 27}{w^2 + w - 12}$$

W =	
W =	

$$\frac{9}{w^2 - 4} = \frac{4 - 5w}{w - 2}$$

W =	
W =	

$$\frac{3}{w - 1} - \frac{2}{w - 1} = \frac{-6}{w^2 - 3w + 2}$$

W =	
W =	

$$\frac{w + 2}{w^2 + 6w - 7} = \frac{8}{w^2 + 3w - 4}$$

W =	
W =	