hw-05a-rational-eqns-equivalent-to-quadratics

Due: **12/12/2015 at 06:00am EST.**

Students will be able to:

- Solve Advance Quadratic Equations with Rational Expressions (Fractions)

Functions and symbols that WeBWorK understands.

Links to some useful WeBWorK pages for students

1. (1 pt) Solve the following equation.

$$1+\frac{3x}{(x+1)(x+3)}=\frac{1}{x+1}+\frac{4}{x+3}$$

Answer: _____

Note: If there is more than one answer, write them separated by commas (e.g., 1, 2).

2. (1 pt) Solve for x: $\frac{1}{x+2}+\frac{1}{x-2}=\frac{1}{x+10}$
Please enter the smaller answer first.

Answer: x = _____, _____

3. (1 pt) Solve the equation for t

$$\frac{8}{2-t}+\frac{2}{2+t}+\frac{4}{4-t^2}=0$$

$t=$ _____

4. (1 pt) Solve the equation

$$\frac{x+1}{x-1}=\frac{-4}{x+3}+\frac{8}{x^2+2x-3}$$

Hint: There is only one non-extraneous root.

$x=$ _____

5. (1 pt) Solve the equation $\dfrac{1}{x+3}-\dfrac{1}{x+4}=\dfrac{1}{2}$.

The solutions are $x_1=$ _____ and $x_2=$ _____
where $x_1 \le x_2$.