Rational Equations

1. Multiply by the LCD.

HOW DO I SOLVE A RATIONAL EQUATION?

STEPS:

- 1) Identify the Excluded Values.
- 2) Find the LCD. Place it over 1.
- **3)** Multiply the LCD by all fractions in the equation.
- 4) Cross-Cancel and Cross-Simplify.
- 5) Solve for x.
 - Check your solution against the excluded values.

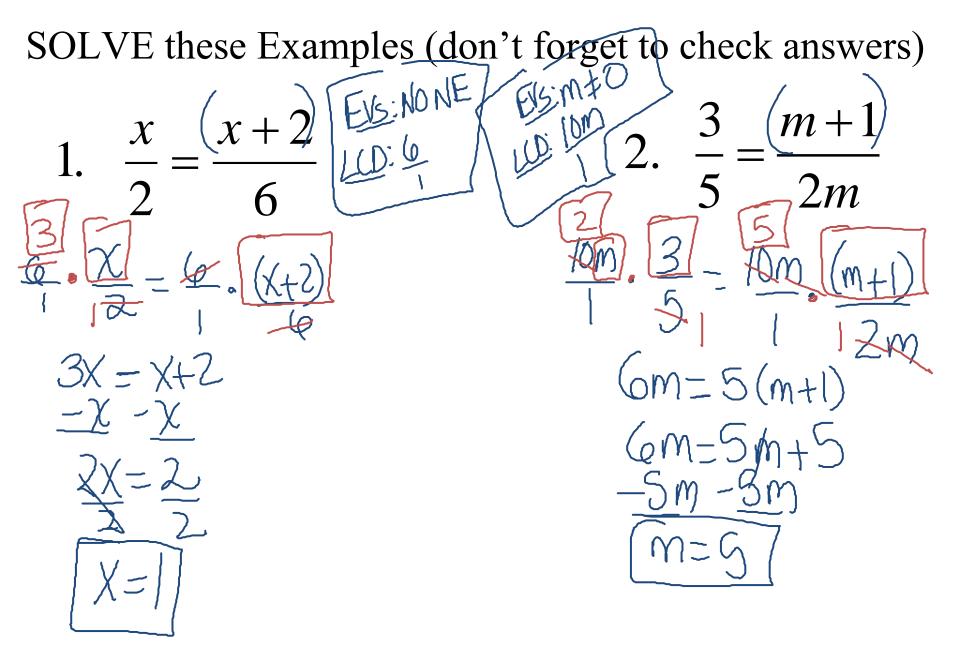
2 (x - 4)3 Z 2(x-4) = 122X - 8 = 12 $\chi \chi = \chi$

 $EV_{5}: \chi \neq 4$ 3/1-4 LCD:

SOLVE these Examples (don't forget to check answers)

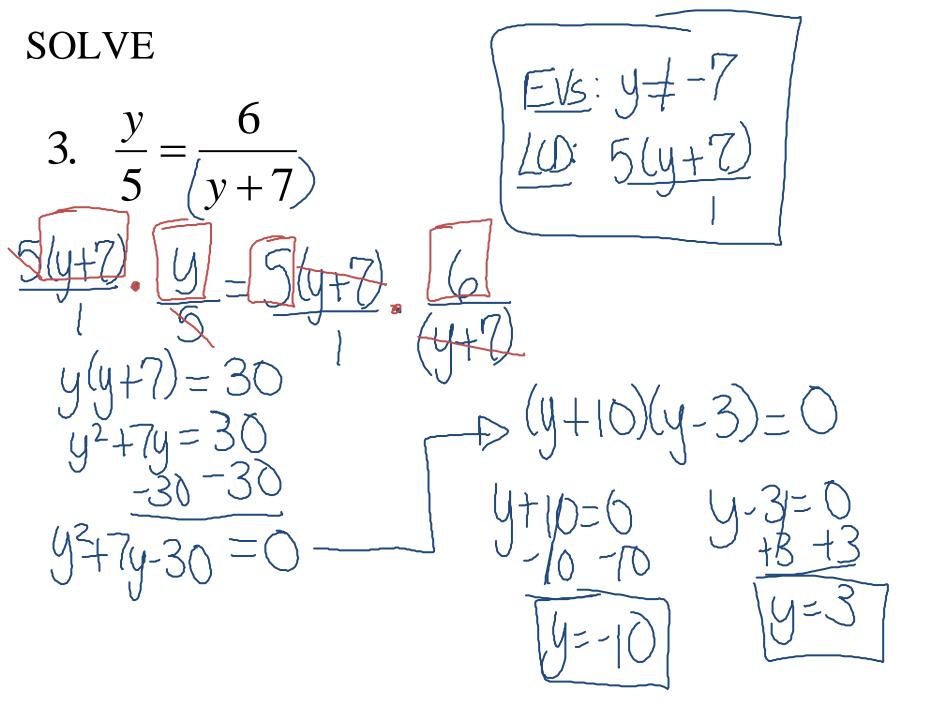


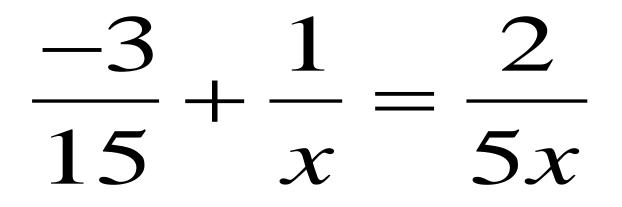




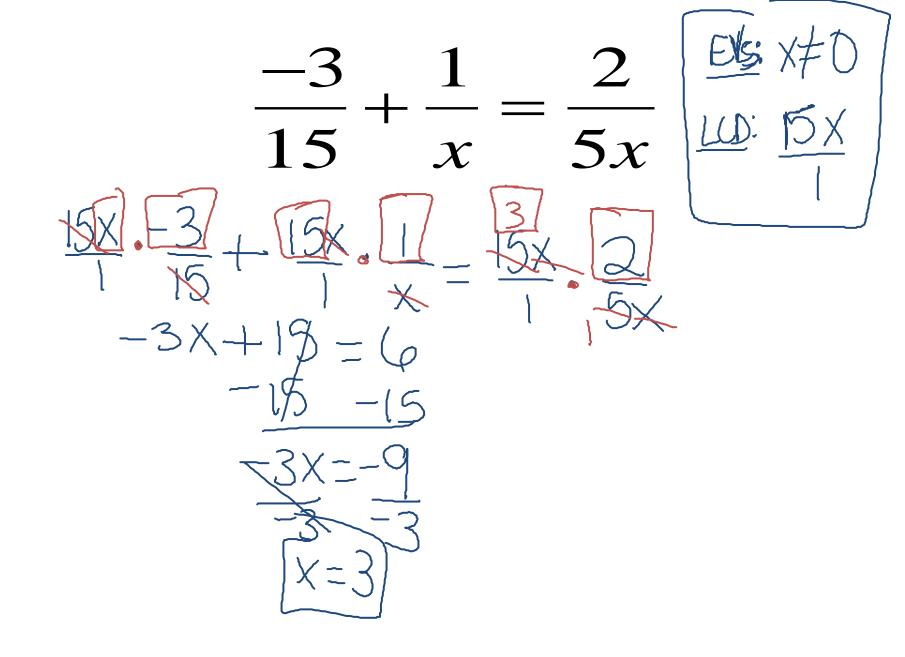
 $3. \quad \frac{y}{5} = \frac{6}{y+7}$

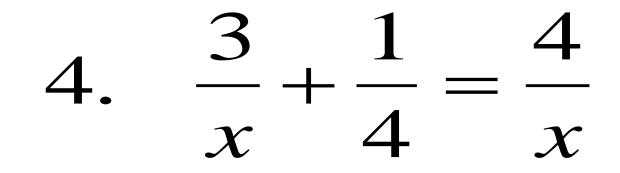
y=3, -10

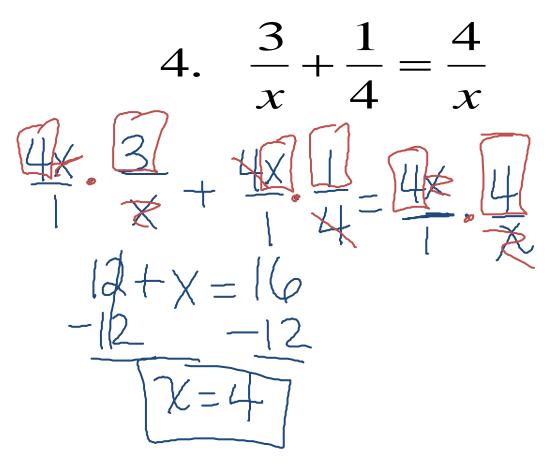


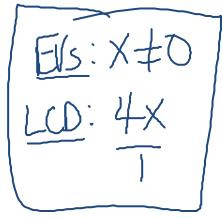


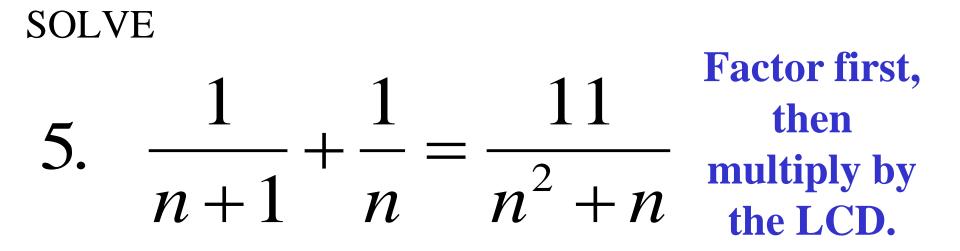
x=3











11 multiply by the 5. $+\frac{1}{n}-\frac{1}{n^{2}+n}$ *n*+1 (ηH) n(n+1)n + n + 1 = 1121+1/= 2n=

then

LCD.

N(n+1)

