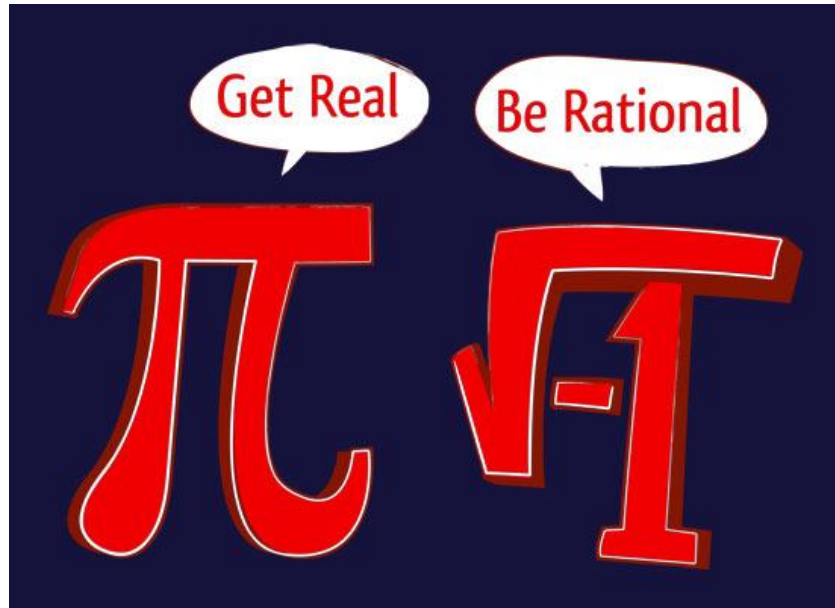


Today, we do it all --
equation style!



$$\frac{x}{4} - \frac{7}{x} = 3$$

Non Permissible Values	$x \neq 0$
Lowest Common Denominator	$4x$
There is an equal sign. Multiply each term by the LCD. Clear fractions.	$\frac{x^2 - 28}{4x} = \frac{12x}{4x}$ $x^2 - 28 = 12x$

Solve. Factoring / Quadratic Formula	$x^2 - 12x - 28 = 0$ $(x - 14)(x + 2)$ $x = 14 \text{ or } x = -2$
Check Non Permissible values. Substitute	

$$y \neq 3, 6$$

$$\frac{9}{y-3} - \frac{4}{y-6} = \frac{18}{y^2 - 9y + 18} \quad \rightarrow (y-6)(y-3)$$

$$\frac{9(y-6) - 4(y-3)}{(y-6)(y-3)} = \frac{18}{(y-6)(y-3)}$$

$$9y - 54 - 4y + 12 = 18$$

$$5y - 42 - 18 = 0$$

$$5y - 60 = 0$$

$$y = \frac{60}{5}$$

$$y = 12$$

$x \neq -2, 3$

$$\frac{3x}{x+2} - \frac{5}{x-3} = \frac{-25}{x^2-x-6}$$

$$\frac{3x}{x+2} - \frac{5}{x-3} + \frac{25}{x^2-x-6} = 0$$

$\rightarrow (x+2)(x-3)$

$$\frac{3x(x-3) - 5(x+2) + 25}{(x+2)(x-3)} = 0$$

$$3x^2 - 9x - 5x - 10 + 25 = 0$$

$$3x^2 - 14x + 15 = 0$$

$$\begin{array}{r} 3x^2 - 9x - 5x + 15 \\ \hline \end{array}$$

$$\begin{array}{l} m = 45 \\ a = -14 \end{array}$$

$$3x(x-3) - 5(x-3)$$

$$(x-3)(3x-5)$$

HW: pg: 349
#1,2,3,4,6