

$$\frac{17}{36} - \frac{3}{10}$$

$$2^2 \cdot 3^2 \quad 2 \cdot 5$$

$$\text{LCD} = 2^2 \cdot 3^2 \cdot 5 = 180$$

$$\begin{array}{r} 2 \overline{)36} \\ 2 \overline{)18} \\ 3 \overline{)9} \\ 3 \end{array}$$

$$\begin{array}{r} 5 \overline{)10} \\ 2 \end{array}$$

$$\frac{17}{2^2 \cdot 3^2} \cdot \frac{5}{5} - \frac{3}{2 \cdot 5} \cdot \frac{2 \cdot 3^2}{2 \cdot 3^2}$$

$$= \frac{85}{\text{LCD}} - \frac{54}{\text{LCD}} = \frac{31}{\text{LCD}} = \frac{31}{180}$$

LCD = 2² · 3³ · 5

$$\frac{7}{30} - \frac{57}{108}$$

$3 \overline{)159}$
 $2 \overline{)108}$
 $2 \overline{)54}$
 $3 \overline{)27}$
 $3 \overline{)9}$
 $2 \overline{)30}$
 $3 \overline{)15}$
 5

$$\frac{7}{2 \cdot 3 \cdot 5} - \frac{57}{2^2 \cdot 3^3}$$

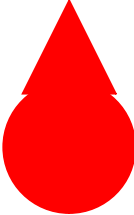
$$\frac{7}{2 \cdot 3 \cdot 5} \cdot \frac{2 \cdot 3^2}{2 \cdot 3^2} - \frac{57}{2^2 \cdot 3^3} \cdot \frac{5}{5} = \frac{126 - 285}{LCD}$$

$\frac{7}{2 \cdot 3 \cdot 5} \cdot \frac{2 \cdot 3^2}{2 \cdot 3^2}$
 $\frac{57}{2^2 \cdot 3^3} \cdot \frac{5}{5}$

$$= \frac{-159}{540} = \frac{-3 \cdot 53}{2^2 \cdot 3^3 \cdot 5}$$

$$= \frac{-53}{2^2 \cdot 3^2 \cdot 5} = \frac{-53}{180}$$

LCD =



Supposedly easier.

$$\frac{7}{30} - \frac{57}{108} = \frac{7(108) - 57(30)}{(30)(108)}$$

$$= \frac{756 - 1710}{(30)(108)} =$$

$$\begin{array}{r} 57 \\ 3 \\ \hline 161 \end{array}$$

↘ 171

$$\begin{array}{r} 1710 \\ - 756 \\ \hline 954 \end{array}$$

Should've brought my calculator

$\begin{array}{r} 2 \overline{) 954} \\ 3 \overline{) 477} \\ 9 \overline{) 159} \\ \hline 53 \end{array}$	$\begin{array}{r} 2 \overline{) 30} \\ 3 \overline{) 15} \\ \hline 5 \end{array}$
$\begin{array}{r} 2 \overline{) 108} \\ 2 \overline{) 54} \\ 3 \overline{) 27} \\ 3 \overline{) 9} \\ \hline 3 \end{array}$	

$$\frac{3}{(x-2)(x+1)} - \frac{5}{(x+1)(x-3)}$$

$LCD = (x-2)(x+1)(x-3)$
Prime factors

$$\left(\frac{3}{(x-2)(x+1)} \right) \left(\frac{x-3}{x-3} \right) - \left(\frac{5}{(x+1)(x-3)} \right) \left(\frac{x-2}{x-2} \right)$$

$$= \frac{3(x-3) - 5(x-2)}{LCD} = \frac{3x-9-5x+10}{LCD}$$

$$= \frac{-2x+1}{LCD}$$

Use the quadratic formula to

factor $2x^2 + 5x - 12$

$$a=2, b=5, c=-12$$

$$b^2 - 4ac = 5^2 - 4(2)(-12)$$

$$= 25 + 96$$

$$= 121$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$= \frac{-5 \pm \sqrt{121}}{2(2)} = \frac{-5 \pm 11}{4}$$

$$\frac{-5+11}{4} = \frac{6}{4} = \frac{3}{2}$$

$$\frac{-5-11}{4} = \frac{-16}{4} = -4$$

$$2\left(x - \frac{3}{2}\right)(x - (-4)) = 2\left(x - \frac{3}{2}\right)(x + 4)$$

$$= (2x - 3)(x + 4) \quad \& \text{ it's factored.}$$

$$x^2 + 4x - 60$$

$$\sqrt{256} = \sqrt{2^8}$$

$$= (2^8)^{\frac{1}{2}}$$

$$= 2^{\frac{8}{2}} = 2^4 = 16$$

$$\begin{array}{r} 2 \overline{)256} \\ \underline{2} \\ 2 \overline{)128} \\ \underline{2} \\ 2 \overline{)64} \\ \underline{2} \\ 2 \overline{)32} \\ \underline{2} \\ 2 \overline{)16} \\ \underline{2} \\ 2 \overline{)8} \\ \underline{2} \\ 2 \overline{)4} \\ \underline{2} \\ 2 \overline{)2} \\ \underline{2} \\ 0 \end{array}$$

Nothing from
Chapter 4 on
the Final

That was Test 3