$$\frac{11\frac{x^{2}}{x^{2}-2} + \frac{x}{x^{2}-2}}{\frac{2(x^{2}-2)}{(x^{2}-2)} + \frac{x}{x^{2}-2}}$$

$$\frac{2x^{2}-4+x}{x^{2}-2}$$

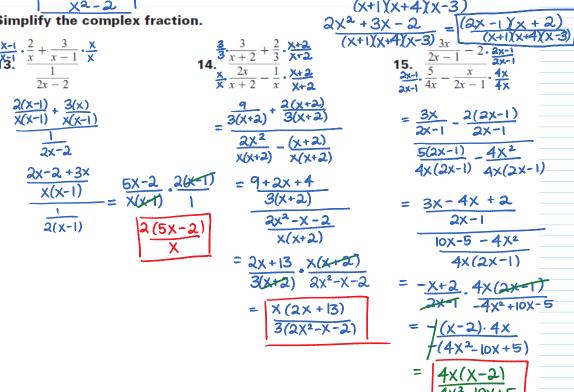
$$\frac{2x^{2}+x-4}{x^{2}-2}$$

12.
$$\frac{x-2}{x^2+x-12} + \frac{x}{x^2-2x-3}$$

$$\frac{(x+1)}{(x+1)} \cdot \frac{x-2}{(x+4)(x-3)} + \frac{x}{(x-3)(x+1)} \cdot \frac{(x+4)}{(x+4)}$$

$$\frac{(x+1)(x-2)}{(x+1)(x+4)(x-3)} + \frac{x(x+4)}{(x+1)(x+4)(x-3)}$$

$$\frac{x^2-2x+x-2+x^2+4x}{(x+1)(x+4)(x-3)}$$



In Exercises 16 and 17, use the following information.

Doctors Over a twenty year period the number of doctors of medicine M (in thousands) in the United States can be approximated by $M = \frac{28,390 + 693t}{85 - t}$ where t = 0represents 1980. The number of doctors of osteopathy B (in thousands) can be approximated by $B = \frac{776 - 12t}{55 - 2t}$

16. Write an expression for the total number T of doctors of medicine (MD) and doctors of osteopathy (DO). Simplify the result.

$$T = \frac{28,390 + 693t}{85 - t} + \frac{776 - 12t}{55 - 2t}$$

17. How many MDs did the United States have in 1990? how many DOs?

$$M = 28,390 + 693(10)$$

$$t=10 \qquad B=776-12(10)$$

$$55-2(10)$$

.. How many mine and the office batter have in 1990, from many noon

$$M = 28,390 + 693(10)$$

$$85 - 10$$

$$471,000MDS$$

$$\beta = 776 - |2(10)|$$

$$55 - 2(10)|$$

$$\approx |9,000|$$

$$(2) (2x-1)(x+2) (x+1)(x+4)(x-3)$$

$$\begin{array}{c}
(4) \times (2X + 13) \\
3\overline{(2X^2 - X - 2)}
\end{array}$$

$$\frac{15) 4x (x-2)}{4x^2 - 10x + 5}$$