Rational Expression Simplification Simplify each of the following expressions

Question 1	Question 2	Question 3
$\frac{3}{2} + \frac{1}{4x}$	$\frac{x}{2} + \frac{1}{3x}$	$\frac{x}{4} + \frac{1}{x+5}$
2 40	2 3x	T X 1 3
Question 4	Question 5	Question 6
Question 4 $\frac{1}{1} + \frac{8}{1}$	Question 5 $\frac{1}{2} + \frac{5}{2}$	Question 6 1 1 1
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$
Question 4 $\frac{1}{2-3x} + \frac{8}{3x-2}$	Question 5 $\frac{1}{2x-4} + \frac{5}{2-x}$	Question 6 $\frac{1}{x-6} + \frac{1}{x+2}$

Question 7	Question 8	Question 9	
$\frac{1}{x-3} + \frac{1}{x^2 - 6x + 9}$	$\frac{1}{x^2 + 6x + 9} + \frac{1}{x^2 - 9}$	$\frac{1}{2x-6} + \frac{1}{x^2-3x}$	
$x-3$ x^2-6x+9	$x^2 + 6x + 9$ $x^2 - 9$	$2x-6$ x^2-3x	

Challenge Problem

$$\frac{1}{x^3 + 6x^2 - 4x - 24} + \frac{1}{x^2 + 4x - 12}$$