

d) Solve the equation. [Don't forget to check if your answer "candidates" are actual answers]

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

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

$$2(x+1) - 5(x+3) = 3x+5$$

$$2x+2 - 5x-15 = 3x+5$$

$$-3x-13 = 3x+5$$

$$\begin{array}{r} +3x \qquad \qquad +3x \\ \hline -13 \qquad = \qquad 6x+5 \\ -5 \qquad \qquad \qquad -5 \end{array}$$

$$\frac{-18}{6} = \frac{6x}{6}$$

$$-3 \neq x$$

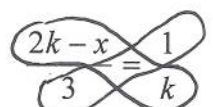
e) State the answer(s). \leftarrow disregard (compare to part (b))

no solutions

17. Give the LCD for the following expression. (Since the numerators are not important, space holders are put in their places.)

$$\frac{\text{#####}}{10x^3(x-6)(x+2)} + \frac{\text{□□□}}{35x^2(x+2)}$$

LCD: $70x^3(x-6)(x+2)$

18. Given  solve for x

$$k(2k-x) = 3 \cdot 1$$

$$2k^2 - kx = 3$$

$$\begin{array}{r} -2k^2 \qquad \qquad \qquad -2k^2 \\ \hline -kx = 3 - 2k^2 \\ -k \qquad \qquad \qquad -k \end{array}$$

$$x = \frac{3 - 2k^2}{-k}$$

alternatively $-\frac{3}{k} + 2k = 2k - \frac{3}{k}$

alternatively $\frac{2k^2 - 3}{k}$