Question Number	Answer	Mark
1 (a)	$\frac{2+11x}{(1+x)(2+5x)} \equiv \frac{A}{1+x}+\frac{B}{2+5x} \Rightarrow$ Values for A and B	M1
	One correct value, either $A=3$ or $B=-4$	A1
	Correct PF form $\frac{3}{1+x}-\frac{4}{2+5x}$	A1
		(3)
(b)	$\frac{'3'}{1+x} = '3'\left(1+x\right)^{-1} = '3'\left(1-x+x^2+...\right)$	B1
	$\frac{'4'}{2+5x} = \frac{'4'}{2}\left(1+\frac{5x}{2}\right)^{-1} = \frac{'4'}{2}\left(1+(-1)\frac{5x}{2}+\frac{(-1)(-2)}{2}\left(\frac{5x}{2}\right)^2+\right)$	M1, A1
	$f(x) = '3'\times\left(1-x+x^2+...\right)-\frac{'4'}{2}\left(1-\frac{5x}{2}+\frac{25x^2}{4}+...\right)$	dM1
	$=1+2x-\frac{19}{2}x^2+...$	A1
		(5)
(c)	Valid $\left\|x\right\|<\frac{2}{5}$ o.e	B1
		(1)
		(9 marks)

(a)

M1: Attempts correct PF. What is seen in the scheme is acceptable. There is no need to see any working. Just look for the correct PF form followed by values for A and B

A1: One correct value for A or B or one correct term

A1: Correct PF form $\frac{3}{1+x}-\frac{4}{2+5x}$ oe. such as $\frac{3}{1+x}+\frac{-4}{2+5x}$

. The correct values for A and B are insufficient but you can award if the correct expression is seen in (b)

(b)

B1: $\frac{'3'}{1+x} = '3'\left(1+x\right)^{-1} = '3'\left(1-x+x^2+...\right)$ correct and simplified which may be implied by a multiplied-out bracket. Ignore any additional terms in x^3 etc, follow through on their '3'

M1: Attempts $\frac{1}{2+5x} = \left(2+5x\right)^{-1} = ...$