

数 学

1	(1)-①	$x=2, 3, 4$	(1)-②	8
	(2)-①	30	(2)-②	39

2	(1)-①	$(-3p^2+2k)$	(1)-②	$2p^3$	(1)-③	$-2p$
	(1)-④	$8p^3-4kp$				
	(2)	$k\geq\frac{2}{3}$				
	(3)-①	$\frac{27}{4}-k^2$	(3)-②	$\frac{2}{2k-3}+\frac{3}{4}$		

3	(1)	$k\cdot 3^k$
	(2)	$S_n=\frac{(2n-1)\cdot 3^{n+1}+3}{4}$

4	(1)	$p_1=\frac{1}{3}$	$p_2=\frac{7}{27}$
	(2)	$p_{n+1}=\frac{1}{9}p_n+\frac{2}{9}$	
	(3)	$p_n=\frac{1}{4}+\frac{1}{12}\left(\frac{1}{9}\right)^{n-1}$	