

NW

P44

①  $12(3x-8)^3$

②  $30x(3x^2+2)^4$

③  $40(x^2+x-1)^9(2x+1)$

④  $\frac{135(4-9x)^{1/2}}{2}$

⑤  $\frac{-3}{(3x-2)^2}$

⑥  $\frac{2(2x-5)}{(x^2-5x-6)^3}$

⑦  $\frac{8}{(2-x)^3}$

⑧  $\frac{-4(x-1)}{(x+1)^3}$

⑨  $\frac{27x^2-18x}{(x^3-x^2+3)^4}$

⑩  $x^2(5x-1)^3(35x-3)$

⑪  $\frac{-1}{2\sqrt{1-t}}$

⑫  $\frac{9x^2-4}{3(3x^3-4x+2)^{2/3}}$

⑬  $\frac{-2}{(2x+3)^{3/2}}$

⑭  $\frac{1}{2\sqrt{x}(\sqrt{x}+1)^2}$

⑮  $\frac{-9}{2(2x-3)^2} \cdot \left(\frac{2x-3}{3x}\right)^{1/2}$

⑯  $\frac{20x^2-12x+1}{2\sqrt{x}}$

⑰  $\frac{-2t^2-8t}{3(t^2-4)^2} \left(\frac{t^2-4}{2t}\right)^{4/3} =$

⑱  $-6x^2(x^2+2x-6)^2(1-x^3) + (1-x^3)^2(4x+4)(x^2+2x-6)$

⑲  $y-4 = \frac{3}{4}(x-2)$

⑳  $y-2 = \frac{1}{2}(x-2)$

㉑  $y-2 = \frac{5}{4}(x+1)$

#22-36 (answers on sheet)

37)

$x =$	-2	-1	0	1	2	3
$g'(x)$	4	$\frac{2}{3}$	$-\frac{1}{3}$	-1	-2	-4
$h'(x)$	8	$\frac{4}{3}$	$-\frac{2}{3}$	-2	-4	-8
$r'(x)$	und	12	1	und	und	und
$s'(x)$	und	$\frac{4}{3}$	-2	-8	und	und