

$f(x)$

$f'(x)$

1	$(1+2x)^4$	A	$7(6+2x)(6x+x^2)^6$
2	$(3-2x^2)^{-5}$	B	$18(8-x)^{-7}$
3	$(3+4x)^{1/2}$	C	$8(1+2x)^3$
4	$(6x+x^2)^7$	D	$-\frac{1}{(3+2x)^2}$
5	$\frac{1}{3+2x}$	E	$32(2+8x)^3$
6	$\sqrt{7-x}$	F	$-\frac{1}{2}(7-x)^{-1/2}$
7	$4(2+8x)^4$	G	$-80x(3-2x^2)^4$
8	$3(8-x)^{-6}$	H	$4(3+2x)$
9	$2(1+2x)^4$	I	$16(1+2x)^3$
10	$(3-2x^2)^{-4}$	L	$16x(3-2x^2)^{-5}$
11	$\sqrt{(3+4x)^3}$	M	$20x(3-2x^2)^{-6}$
12	$\frac{1}{\sqrt{7-x}}$	N	$-2(3+2x)^{-2}$
13	$(2+8x)^4$	O	$128(2+8x)^3$
14	$(3-2x^2)^7$	P	$96(2+8x)^2$
15	$4(3-2x^2)^5$	R	$6(3+4x)^{1/2}$
16	$4(1+2x)^2$	S	$2(3+4x)^{-1/2}$
17	$(6+4x)^{-1}$	T	$-28x(3-2x^2)^6$
18	$(3+2x)^2$	U	$\frac{1}{2}(7-x)^{-3/2}$
19	$(8-x)^{-4}$	V	$16(1+2x)$
20	$4(2+8x)^3$	W	$4(8-x)^{-5}$

8-7-14-18

6-9-1-K-10-13

17-19-4-11-16-13-3

J-9-5-X

2-Y

20-9-15

$$1) \int (5-3x)^2 dx$$

$$2) \int \frac{x}{\sqrt{6+9x^2}} dx$$

$$3) \int (480+1620x^2)(8x+9x^3)^5 dx$$

$$4) \int (9x^2-4x+5)(3x^3-2x^2+5x-3)^{-2/5} dx$$

$$5) \int x^4 (12x^5-2)^{14/3} dx$$

The 5 correct letters spell a girl's forename (anagram)

$$R = 9(5-3x)^2 + c$$

$$B = \frac{1}{9}(5-3x)^3 + c$$

$$N = (12x^5-2)^{17/3} + c$$

$$D = \frac{5}{3}(3x^3-2x^2+5x-3)^{3/5} + c$$

$$Q = \frac{1}{9(6+9x^2)^{1/2}} + c$$

$$M = -\frac{1}{9}(5-3x)^3 + c$$

$$P = (8x+9x^3)^6 + c$$

$$A = \frac{3}{112}(12x^5-2)^{17/3} + c$$

$$I = -\frac{3}{112}(12x^5-2)^{17/3} + c$$

$$R = \frac{1}{18}\sqrt{6+9x^2} + c$$

$$S = 10(8x+9x^3)^6$$

$$A = (5-3x)^3 + c$$

$$J = \frac{1}{3}(5-3x)^3 + c$$

$$O = \frac{1}{2}\sqrt{6+9x^2}$$

$$I = 60(8x+9x^3)^6 + c$$

$$V = \frac{3}{5}(3x^3-2x^2+5x-3)^{3/5} + c$$

$$E = \frac{1}{9}(6+9x^2) + c$$

$$N = \frac{1}{9}(5-3x)^3$$

$$T = -\frac{5}{3}(3x^3-2x^2+5x-3)^{3/5} + c$$

$$Y = \frac{10}{6}(8x+9x^3)^6 + c$$

$$L = \frac{3}{1120}(12x^5-2)^{17/3}$$

$$E = (8x+9x^3)^6 + c$$

$$N = 10x(8+9x^2)^6 + c$$

$$A = \frac{1}{9}\sqrt{6+9x^2} + c$$

$$Y = \frac{1}{3}x^3 \frac{3}{17}(12x^5-2)^{17/3} + c$$

$$E = \frac{3}{1120}(12x^5-2)^{17/3} + c$$

$$G = 10(8x+9x^3)^6 + c$$

$$S = \frac{1}{1120}(12x^5-2)^{17/3} + c$$

$$L = (5-3x)^2 + c$$

$$I = -\frac{1}{3}(5-3x)^3 + c$$

$$A = -\frac{1}{27}(5-3x)^3 + c$$

$$E$$