

## integrali immediati risolvibili mediante l'integrazione delle funzioni elementari

1	$\int dx$	$x + c$
2	$\int 5 dx$	$5x + c$
3	$\int x dx$	$\frac{x^2}{2} + c$
5	$\int 5x dx$	$\frac{5}{2}x^2 + c$
4	$\int \frac{\pi x}{\sqrt{3}} dx$	$\frac{\pi}{6}\sqrt{3}x^2 + c$
6	$\int 3x^2 dx$	$x^3 + c$
7	$\int 5x^5 dx$	$\frac{5}{6}x^6 + c$
8	$\int 7x^{48} dx$	$\frac{x^{49}}{7} + c$
9	$\int 5x^{-5} dx$	$-\frac{x^{-4}}{4} + c$
10	$\int \frac{1}{x^2} dx$	$-\frac{1}{x} + c$
11	$\int \frac{\sqrt{2}}{x^3} dx$	$-\frac{\sqrt{2}}{2x^2} + c$
12	$\int \frac{3}{x^4} dx$	$-\frac{1}{x^3} + c$
13	$\int \sqrt{x} dx$	$\frac{2}{3}x\sqrt{x} + c$
14	$\int \sqrt[3]{x} dx$	$\frac{3}{4}x\sqrt[3]{x} + c$

15	$\int 2\sqrt[7]{x^3} dx$	$\frac{7}{5} x \sqrt[7]{x^3} + c$
16	$\int 7x^5 \sqrt[3]{x} dx$	$\frac{21}{19} x^6 \sqrt[3]{x} + c$
17	$\int \frac{x^3}{\sqrt{x}} dx$	$\frac{2}{7} x^3 \sqrt{x} + c$
18	$\int \frac{3}{x^{\frac{3}{2}}} dx$	$9 \sqrt[3]{x} + c$
19	$\int \sqrt[4]{x^3} \sqrt[3]{x} dx$	$\frac{12}{25} x^2 \sqrt[12]{x} + c$
20	$\int \frac{\sqrt[4]{x}}{x} dx$	$4 \sqrt[4]{x} + c$
21	$\int \frac{-2x}{7\sqrt[5]{x}} dx$	$-\frac{10}{63} x \sqrt[5]{x^4} + c$
22	$\int \frac{x \sqrt[4]{x}}{\sqrt[3]{x}} dx$	$\frac{12}{23} x \sqrt[12]{x^{11}} + c$
23	$\int 4x^3 \sqrt[5]{x} dx$	$\frac{20}{21} x^4 \sqrt[5]{x} + c$
24	$\int \frac{7}{x} dx$	$7 \ln x + c$
25	$\int \left(\frac{3}{4}\right)^x dx$	$\left(\frac{3}{4}\right)^x \log_{\frac{3}{4}} e + c$
26	$\int \frac{\ln 7}{x} dx$	$\ln 7 \cdot \ln x + c$
27	$\int \left(\frac{1}{7}\right)^x dx$	$-\left(\frac{1}{7}\right)^x \log_7 e + c$
28	$\int e^{5-3x} e^{3x} dx$	$e^5 x + c$

## funzioni goniometriche

30	$\int 4 \cos x \, dx$	$4 \sin x + c$
29	$\int \frac{\sqrt{2}}{\cos^2 x} \, dx$	$\sqrt{2} \tan x + c$
31	$\int \frac{7}{x^2 + 1} \, dx$	$7 \arctan x + c$
32	$\int -8\pi \tan x \cos x \, dx$	$8\pi \cos x + c$
33	$\int \frac{-3}{\sqrt{1-x^2}} \, dx$	$-3 \arcsin x + c$
34	$\int -\frac{\pi e}{\sin^2 x} \, dx$	$\pi e \cot x + c$
35	$\int \frac{-2}{9 \sin^2 x} \, dx$	$\frac{2}{9} \cot x + c$
36	$\int -\frac{\sqrt{3}}{\cos^2 x} \, dx$	$-\sqrt{3} \tan x + c$
37	$\int 2(1 + \tan^2 x) \, dx$	$2 \tan x + c$
38	$\int -\frac{1}{1+x^2} \, dx$	$\operatorname{arccot} x + c$
39	$\int -3(1 + \cot^2 x) \, dx$	$3 \cot x + c$
40	$\int \frac{8}{\sqrt{1-x^2}} \, dx$	$8 \arcsin x + c$
41	$\int -\sqrt{3} \sec^2 x \, dx$	$-\sqrt{3} \tan x + c$
42	$\int \frac{-5}{\sqrt{1-x^2}} \, dx$	$-5 \arcsin x + c$

43	$\int 3 \sin 2x \sec x \, dx$	$-6 \cos x + c$
44	$\int -\frac{7}{5} \csc^2 x \, dx$	$\frac{7}{5} \cot x + c$
45	$\int -6 \sin x \cot x \, dx$	$-6 \sin x + c$
46	$\int 2\pi \sin 2x \csc x \, dx$	$4\pi \sin x + c$
47	$\int \frac{x^2 + 2}{x^2 + 1} \, dx$	$\arctan x + x + c$
48	$\int \frac{x^2 - 5}{x^2 + 1} \, dx$	$x - 6 \arctan x + c$
49	$\int \frac{5 \cot^2 x}{\cos^2 x} \, dx$	$-5 \cot x + c$
50	$\int \frac{\tan^2 x}{3 \sin^2 x} \, dx$	$\frac{\tan x}{3} + c$
51	$\int \frac{7 \sqrt{1-x^2}}{1-x^2} \, dx$	$7 \arcsin x + c$
52	$\int -\frac{6 \csc x}{7 \sin x} \, dx$	$\frac{6}{7} \cot x + c$
53	$\int -\frac{1 \sec x}{2\sqrt{\pi} \cos x} \, dx$	$-\frac{\tan x}{2\sqrt{\pi}} + c$
54	$\int \frac{5e \sin x}{\cos^2 x + \sin^2 x} \, dx$	$-5e \cos x + c$
55	$\int \frac{3 - \sqrt{1-x^2}}{\sqrt{1-x^2}} \, dx$	$3 \arcsin x - x + c$
56	$\int \frac{1}{\sec^2 x} + \frac{1}{\csc^2 x} \, dx$	$x + c$

integrali immediati generalizzati risolubili mediante semplice trasformazione della funzione integranda: (i risultati sono riportati alla fine del file)

57	$\int x (x^2 + 3)^5 dx$	58	$\int \frac{x^3}{x^4 - 3} dx$
59	$\int (7 + e^x)^4 e^x dx$	60	$\int x^3 e^{x^4} dx$
61	$\int \frac{e^{\sqrt{x}}}{\sqrt{x}} dx$	62	$\int x (x^2 + 7) dx$
63	$\int \frac{\ln^4 x}{x} dx$	64	$\int (2x - 9)^7 dx$
65	$\int \frac{6x - 1}{3x^2 - x + 1} dx$	66	$\int \frac{2x + 1}{x^2 + x + 5} dx$
67	$\int e^{4x-2} dx$	68	$\int x e^{x^2} dx$
69	$\int (x + 2)^7 dx$	70	$\int e^{5x-2} dx$
71	$\int \frac{\ln^6 x}{x} dx$	72	$\int \frac{1}{3x + 5} dx$
73	$\int x (x^2 + 1)^4 dx$	74	$\int (x + 1)^8 dx$
75	$\int (5 + e^x)^3 e^x dx$	76	$\int 7 x^4 e^{5-x^5} dx$
77	$\int \frac{x^2}{x^3 + 1} dx$	78	$\int \frac{x^3}{\sqrt{1 + x^4}} dx$
79	$\int \sqrt{2 - 3x + 7x^3} (7x^2 - 1) dx$	80	$\int \frac{1}{x \sqrt[3]{8 - 5 \ln x}} dx$
81	$\int 6 e^{2x} dx$	82	$\int e^{6x} dx$

83	$\int \frac{x^2}{\sqrt{1+x^3}} dx$	84	$\int (7x-7)^7 dx$
85	$\int \frac{1}{x\sqrt{\ln x}} dx$	86	$\int \frac{x}{(x^2+a^2)^5} dx$
87	$\int (x^2-5)^5 3x dx$	88	$\int \frac{1}{2+e^{-x}} dx$
89	$\int \frac{3}{x\sqrt[3]{7-4\ln x}} dx$	90	$\int e^{3-\pi x} dx$
91	$\int (6-6x)^6 dx$	92	$\int (2x^3-x)(x^4-x^2+3)^5 dx$
93	$\int x(x^2-5)^3 dx$	94	$\int \frac{\ln^5 x}{3x} dx$
95	$\int \sqrt{-2x+x^4} (2x^3-1) dx$	96	$\int \sqrt{5-x} dx$
97	$\int \frac{\ln(x-2)}{x-2} dx$	98	$\int \frac{2}{5+3x} dx$
99	$\int \frac{2x-1}{\sqrt{x^2-x-5}} dx$	100	$\int \frac{-1}{\sqrt[3]{x+6}} dx$
101	$\int \frac{2x-3x^2}{x^2+7-x^3} \ln(x^2+7-x^3) dx$	102	$\int \frac{\ln^5(x-2)}{x-2} dx$
103	$\int \frac{1}{\sqrt{x}(\sqrt{x}+2)} dx$	104	$\int \frac{e^x+2}{2x+e^x} dx$
105	$\int \frac{e^x+e^{-x}}{e^x-e^{-x}} dx$	106	$\int x e^{2x} dx$
107	$\int e^{5-x} dx$	108	$\int \frac{1}{x \ln x} dx$

## funzioni goniometriche

109	$\int \sin^4 x \cos x \, dx$	110	$\int \frac{\tan^4 x}{\cos^2 x} \, dx$
111	$\int \sin^5 x \cos x \, dx$	112	$\int \frac{1}{\sqrt{1-9x^2}} \, dx$
113	$\int \frac{e^x}{1+e^{2x}} \, dx$	114	$\int \frac{x}{\sin^2 x^2} \, dx$
115	$\int \frac{\arctan^3 x}{1+x^2} \, dx$	116	$\int \frac{x^2}{\cos^2 x^3} \, dx$
117	$\int \frac{\sqrt{2+\cot x}}{\sin^2 x} \, dx$	118	$\int e^x \cos(e^x) \, dx$
119	$\int \sin(6x+3) \, dx$	120	$\int \tan(5x-2) \, dx$
121	$\int \frac{3+\sin x}{3x-\cos x} \, dx$	122	$\int \frac{x^3}{\sqrt{1-x^8}} \, dx$
123	$\int \sin x \sqrt{(1+\cos x)} \, dx$	124	$\int \frac{\sin(\ln x)}{x} \, dx$
125	$\int \frac{x^3}{1+x^8} \, dx$	126	$\int \frac{1}{(1+x)\sqrt{x}} \, dx$
127	$\int \cos x e^{\sin x} \, dx$	128	$\int \frac{\sin x \cos x}{\sqrt{1+\sin^2 x}} \, dx$
129	$\int \sin(5x+4) \, dx$	130	$\int \frac{2 \arcsin x}{\sqrt{1-x^2}} \, dx$
131	$\int \frac{\arcsin^2 x}{\sqrt{1-x^2}} \, dx$	132	$\int \frac{\cos x}{\sin^2 x} \, dx$
133	$\int \frac{1}{x\sqrt{1-\ln^2 x}} \, dx$	134	$\int \frac{\arctan^7 x}{1+x^2} \, dx$

135	$\int \frac{\cos x}{\sin^3 x} dx$	136	$\int \frac{\cos x}{1 + \sin^2 x} dx$
137	$\int x \sin(3 + x^2) dx$	138	$\int \frac{e^{\arctan x}}{1 + x^2} dx$
139	$\int (2x + 5) \sin(x^2 + 5x) dx$	140	$\int \frac{1 - \sin x}{x + \cos x} dx$
141	$\int \cos(7x + 3) dx$	142	$\int \frac{e^x}{\sqrt{1 - e^{2x}}} dx$
143	$\int \frac{x}{1 + x^4} dx$	144	$\int \cos x \sqrt{3 + \sin x} dx$
145	$\int \cos 4x dx$	146	$\int 3 \sin 5x dx$
147	$\int \frac{\cos \ln x}{x} dx$	148	$\int \frac{x^2}{\sqrt{1 - x^6}} dx$
149	$\int \frac{\cos x}{5 + \sin^2 x} dx$	150	$\int \frac{\tan^3 x}{\cos^2 x} dx$
151	$\int \frac{1}{\sqrt{1 - 4x^2}} dx$	152	$\int \frac{2x^2}{1 + x^6} dx$
153	$\int \sqrt{1 - \sin x} \cos x dx$	154	$\int e^x \sin(e^x) dx$
155	$\int \frac{\sin x}{1 + \cos x} dx$	156	$\int \frac{x}{\cos^2 x^2} dx$
157	$\int \frac{\arcsin(1 - 2x)}{\sqrt{x - x^2}} dx$	158	$\int \sqrt{\frac{\sin x}{\cos^5 x}} dx$
159	$\int \frac{\arcsin^4 x}{\sqrt{1 - x^2}} dx$	160	$\int \tan(2x + 3) dx$



161	$\int \frac{e^{\arcsin x}}{\sqrt{1-x^2}} dx$	162	$\int \frac{1}{(1+x)\sqrt{x}} dx$
163	$\int \frac{\sin x \cos x}{\sqrt{1+\cos^2 x}} dx$	164	$\int \frac{1}{\sqrt[3]{x^2} (1+\sqrt[3]{x^2})} dx$
165	$\int \frac{5}{\sqrt{x}(1+x)} dx$	166	$\int \frac{1}{(1+a+x)\sqrt{a+x}} dx$
167	$\int \frac{1}{x(9+\ln^2 x)} dx$	168	$\int \sin x \cos x dx$
169	$\int \sin x \cos^6 x dx$	170	$\int \sin x (1-\cos x) dx$
171	$\int \frac{5 \cot^2 x}{\sin^2 x} dx$	172	$\int \frac{1+\tan x}{\cos^2 x} dx$
173	$\int \frac{1}{\arctan x (1+x^2)} dx$	174	$\int \tan x dx$
175	$\int \cot x dx$	176	$\int \frac{\sin x \cos x}{7 \sin^2 x + 7} dx$
177	$\int \frac{\sin x + \cos x}{\sin x - \cos x} dx$	178	$\int \frac{x}{\sqrt{1-x^4}} dx$
179	$\int \frac{1}{1+3x^2} dx$	180	$\int \cos 3x dx$
181	$\int \frac{1}{x(1+\ln^2 x)} dx$	182	$\int x^3 \cos x^4 dx$
183	$\int -\frac{\sin \ln x}{x} dx$	184	$\int \frac{1}{x^2} \cos \frac{1}{x} dx$
185	$\int (\tan^5 x + \tan^3 x) dx$	186	$\int \frac{1}{8+x^2} dx$

## integrazione per decomposizione in somma

187	$\int \left( 3x^2 + \frac{2}{x} - 3e^x \right) dx$	$x^3 + 2 \ln x  - 3e^x + c$
188	$\int \frac{2x^4 - 3x^2 + 7x}{x^2} dx$	$\frac{2}{3}x^3 - 3x + 7 \ln x  + c$
189	$\int (1 - x^2)^2 dx$	$x - \frac{2}{3}x^3 + \frac{1}{5}x^5 + c$
190	$\int \frac{\sqrt{x} - 2\sqrt[3]{x^2} + 1}{\sqrt[4]{x}} dx$	$\frac{4}{5}x\sqrt[4]{x} - \frac{24}{17}x^{12}\sqrt{x^5} + \frac{4}{3}\sqrt[4]{x^3} + c$
191	$\int (4\sqrt{x} + 2x^4 + 5) dx$	$\frac{8}{3}x\sqrt{x} + \frac{2}{5}x^5 + 5x + c$
192	$\int (2x + 5)^3 dx$	$2x^4 + 20x^3 + 75x^2 + 125x + c$
193	$\int \left( 2\sqrt[4]{x^3} + 2\sqrt{x} + \frac{3}{\sqrt[3]{x}} \right) dx$	$\frac{8}{7}x\sqrt[4]{x^3} + \frac{4}{3}x\sqrt{x} + \frac{9}{2}\sqrt[3]{x^2} + c$
194	$\int \frac{x+3}{x-2} dx$	$x + 5 \ln x-2  + c$
195	$\int \left( x^2 - \frac{2x-1}{x^2} \right) dx$	$\frac{x^3}{3} - 2 \ln x  - \frac{1}{x} + c$
196	$\int \left( 5x^3 - \frac{3}{x^2} \right) \left( 5x^3 + \frac{3}{x^2} \right) dx$	$x + 5 \ln x-2  + c$
197	$\int \frac{x}{x-1} dx$	$\frac{x^3}{3} - 2 \ln x  - \frac{1}{x} + c$
198	$\int \left( \sqrt[3]{x^2} - \frac{1}{\sqrt[3]{x^2}} \right) dx$	$\frac{3}{5}x\sqrt[3]{x^2} - 3\sqrt[3]{x} + c$
199	$\int \frac{3x^4 - 2x^3 + x - 5}{x^3} dx$	$\frac{3}{2}x^2 - 2x - \frac{1}{x} + \frac{5}{2x^2} + c$
200	$\int \frac{x^3 - 1}{x - 1} dx$	$\frac{x^3}{3} + \frac{x^2}{2} + x + c$

## funzioni goniometriche

201	$\int (5 \sin x - 7 \cos x) dx$	$-5 \cos x - 7 \sin x + c$
202	$\int (9 - 4 \sin x + \cos x) dx$	$9x + 4 \cos x + \sin x + c$
203	$\int (5 \cos x - 6 \sin x - 4x - 7) dx$	$5 \sin x + 6 \cos x - 2x - 7x + c$
204	$\int \left( \frac{4}{1+x^2} - \frac{2}{3} \cos x \right) dx$	$4 \arctan x - \frac{2}{3} \sin x + c$
205	$\int \left( \frac{-2}{\sqrt{1-x^2}} + \sec^2 x \right) dx$	$-2 \arcsin x + \tan x + c$
206	$\int \frac{\cos^3 x + 4}{\cos^2 x} dx$	$\sin x + 4 \tan x + c$
207	$\int (\tan^2 x - \cot^2 x) dx$	$\tan x + \cot x + c$
208	$\int \frac{\cos 2x}{\cos x + \sin x} dx$	$\sin x + \cos x + c$
209	$\int \frac{2 \cos x + \sin 2x}{\cos x} dx$	$2x - 2 \cos x + c$
210	$\int \frac{x^2 + 2}{x^2 + 1} dx$	$\arctan x + x + c$
211	$\int \frac{\sin x + \cos x}{\sin^3 x} dx$	$-\cot x - \frac{1}{2 \sin^2 x} + c$
212	$\int (\cot x + \tan x) dx$	$\ln \tan x  + c$
213	$\int (\sin 2x + \cos 2x) dx$	$\frac{\sin 2x - \cos 2x}{2} + c$
214	$\int \cos^3 x dx$	$\sin x - \frac{\sin^3 x}{3} + c$

## integrazione per parti

215	$\int \ln x \, dx$	$x (\ln x - 1) + c$
216	$\int x^2 \ln x \, dx$	$\frac{1}{9} x^3 (3 \ln x - 1) + c$
217	$\int x e^x dx$	$(x - 1) e^x + c$
218	$\int \ln^2 x \, dx$	$x (\ln^2 x - 2 \ln x + 2) + c$
219	$\int x^2 e^{3x} dx$	$\frac{e^{3x} (9x^2 - 6x + 2)}{27} + c$
220	$\int x^2 e^{-2x} dx$	$-\frac{e^{-2x} (2x^2 + 2x + 1)}{4} + c$
221	$\int x \ln x \, dx$	$\frac{x^2 (2 \ln x - 1)}{4} + c$
222	$\int x e^{-x} dx$	$-e^{-x} (x + 1) + c$
223	$\int x^2 e^x dx$	$e^x (x^2 - 2x + 2) + c$
224	$\int x \sin x \, dx$	$-x \cos x + \sin x + c$
225	$\int \arctan x \, dx$	$x \arctan x - \frac{1}{2} \ln(1 + x^2) + c$
226	$\int \arcsin x \, dx$	$x \arcsin x + \sqrt{1 - x^2} + c$
227	$\int \arccos x \, dx$	$x \arccos x - \sqrt{1 - x^2} + c$
228	$\int e^x \sin x \, dx$	$\frac{1}{2} e^x (\sin x - \cos x) + c$
229	$\int x \arctan x \, dx$	$\frac{x^2 \arctan x - x + \arctan x}{2} + c$
230	$\int x^2 \cos 2x \, dx$	$\frac{2x \cos 2x + (2x^2 - 1) \sin 2x}{4} + c$
231	$\int x \cos x \, dx$	$x \sin x + \cos x + c$

## esercizi di integrazione per parti più impegnativi

232	$\int e^x \sin^2 x \, dx$	$\frac{e^x}{5} (5 \sin^2 x - \sin 2x + 2 \cos 2x) + c$
233	$\int \ln(x^2 + 1) \, dx$	$x \ln(x^2 + 1) - 2x + 2 \arctan x + c$
234	$\int x \arcsin x \, dx$	$\frac{2x^2 - 1}{4} \arcsin x + \frac{x}{4} \sqrt{1 - x^2} + c$
235	$\int \sin^2 x \, dx$	$\frac{1}{2} (x - \sin x \cos x) + c$
236	$\int \cos^2 x \, dx$	$\frac{1}{2} (x + \sin x \cos x) + c$
237	$\int x^2 \cos x \, dx$	$x^2 \sin x + 2x \cos x - 2 \sin x + c$
238	$\int x^2 \sin x \, dx$	$-x^2 \sin x + 2x \cos x + 2 \sin x + c$
239	$\int \frac{x+1}{x^2} \ln x \, dx$	$\frac{\ln^2 x}{2} - \frac{1 + \ln x}{x} + c$
240	$\int \ln(x + \sqrt{1 + x^2}) \, dx$	$\ln(x + \sqrt{1 + x^2}) - \sqrt{1 + x^2} + c$
241	$\int \arctan \sqrt{x} \, dx$	$(x + 1) \arctan \sqrt{x} - \sqrt{x} + c$
242	$\int \frac{x}{\cos^2 x} \, dx$	$x \tan x + \ln \cos x  + c$
243	$\int x^3 e^{-x^2} \, dx$	$-\frac{1}{2} e^{-x^2} (x^2 + 1) + c$
244	$\int \frac{\ln x}{\sqrt{x}} \, dx$	$2\sqrt{x} \ln x - 4\sqrt{x} + c$
245	$\int x^2 \arctan x \, dx$	$-\frac{1}{6} x^2 + \frac{1}{6} \ln(1 + x^2) + \frac{1}{3} x^3 \arctan x + c$
246	$\int e^x \cos^2 x \, dx$	$e^x \left( \cos^2 x + \frac{\sin 2x - \cos 2x}{5} \right) + c$
247	$\int \arctan \frac{x-1}{x+1} \, dx$	$x \arctan \frac{x-1}{x+1} - \ln \sqrt{1 + x^2} + c$
248	$\int \sqrt{a^2 - x^2} \, dx$	$\frac{a^2}{2} \arcsin \frac{x}{a} + \frac{x}{2} \sqrt{a^2 - x^2} + c$

## integrazione per sostituzione

249	$\int \frac{e^{\sqrt{x}}}{\sqrt{x}} dx$	$2e^{\sqrt{x}} + c$
250	$\int \frac{e^x}{2 + e^x} dx$	$\ln(2 + e^x) + c$
251	$\int \frac{1}{(1+x)\sqrt{x}} dx$	$2 \arctan \sqrt{x} + c$
252	$\int \frac{1}{e^x + e^{-x}} dx$	$\arctan e^x + c$
253	$\int \sqrt{1+4x} dx$	$\frac{1}{6} (1+4x)\sqrt{1+4x} + c$
254	$\int x \sqrt[3]{2-x} dx$	$-\frac{9+6x}{14} (2-x)\sqrt[3]{2-x} + c$
255	$\int \frac{1}{x\sqrt{2x-1}} dx$	$2 \arctan \sqrt{2x-1} + c$
256	$\int \frac{1 - \cos x}{(x - \sin x)^2} dx$	$\frac{1}{\sin x - x} + c$
257	$\int \frac{\cos x}{1 + \sin^2 x} dx$	$\arctan \sin x + c$
258	$\int \frac{e^x - e^{-x}}{e^x + e^{-x}} dx$	$\ln(e^x + e^{-x}) + c$
259	$\int \frac{\sin(1 - \sqrt{x})}{\sqrt{x}} dx$	$2\cos(1 - \sqrt{x}) + c$
260	$\int e^x \sqrt[4]{e^x + 5} dx$	$\frac{4}{5} (e^x + 5) \sqrt[4]{e^x + 5} + c$
261	$\int \frac{4e^x}{e^{2x} + 1} dx$	$4 \arctan e^x + c$
262	$\int \frac{x}{\sqrt{4-x}} dx$	$-\frac{2}{3} (8+x)\sqrt{4-x} + c$
263	$\int \frac{\sin(\ln x)}{x} dx$	$-\cos \ln x + c$
264	$\int \cot x \cdot \csc x dx$	$-\frac{1}{\sin x} + c$
265	$\int \frac{x}{\sqrt{x+1}} dx$	$\frac{2}{3} (x-2)\sqrt{x+1} + c$

## esercizi di integrazione per sostituzione più impegnativi

266	$\int \frac{\tan^3 x + \tan x}{\tan x + 6} dx$	porre $\tan x = t$	$\tan x - \ln(\tan x + 6)^6 + c$
267	$\int \frac{2 \tan x}{9 + \cos^2 x} dx$	porre $\tan x = t$	$\frac{1}{9} \ln(10 + 9 \tan^2 x) + c$
268	$\int \sqrt{\sin x} \cos^3 x dx$	porre $\sin x = t$	$\frac{2}{21} \sin x \sqrt{\sin x} (7 - 3 \sin^2 x) + c$
269	$\int \frac{1}{x \sqrt{1 - \ln^2 x}} dx$	porre $\ln x = t$	$\arcsin(\ln x) + c$
270	$\int \frac{\tan \frac{4}{3} x}{\cos^2 \frac{4}{3} x} dx$	porre $\cos \frac{4}{3} x = t$	$\frac{3}{8} \cos^{-2} \left( \frac{4}{3} x \right) + c$
271	$\int \sqrt{e^x - 1} dx$	porre $\sqrt{e^x - 1} = t$	$2(\sqrt{e^x - 1} - \arctan \sqrt{e^x - 1}) + c$
272	$\int \sqrt{1 - x^2} dx$	porre $x = \sin t$	$\frac{1}{2} \arcsin x + \frac{1}{2} x \sqrt{1 - x^2} + c$
273	$\int \frac{\sqrt{x^2 + 1}}{x^2} dx$	porre $x = \tan t$	$\ln  x + \sqrt{x^2 + 1}  - \frac{\sqrt{x^2 + 1}}{x} + c$
274	$\int \frac{1}{\sqrt{5 - x^2}} dx$	porre $x = \sqrt{5} t$	$\arcsin \frac{x}{\sqrt{5}} + c$
275	$\int \frac{\sqrt{1 - x^2}}{x^2} dx$	porre $x = \sin t$	$-\frac{1}{x} \sqrt{1 - x^2} - \arcsin x + c$
276	$\int \frac{x^2}{\sqrt{1 - x^2}} dx$	porre $x = \sin t$	$-\frac{x}{2} \sqrt{1 - x^2} + \frac{1}{2} \arcsin x + c$
277	$\int \tan^4 x dx$	porre $\tan x = t$	$\frac{1}{3} \tan^3 x - \tan x + x + c$
278	$\int \frac{1}{\sqrt{(1 + x^2)^3}} dx$	porre $x = \tan t$	$\frac{x}{\sqrt{1 + x^2}} + c$
279	$\int \frac{\sqrt{x}}{\sqrt{1 - x}} dx$	porre $x = \sin^2 t$	$\arcsin \sqrt{x} - \sqrt{x - x^2} + c$
280	$\int \sqrt{\frac{1 + x}{1 - x}} dx$	porre $x = \sin t$	$\arcsin x - \sqrt{1 - x^2} + c$
281	$\int \frac{1}{(1 + 2x^2) \sqrt{1 + x^2}} dx$	porre $x = \tan t$	$\arctan \frac{x}{\sqrt{1 + x^2}} + c$

## integrazione di funzioni razionali fratte

con denominatore di primo grado

282	$\int \frac{2}{x} dx$	$2 \ln x  + c$
283	$\int \frac{8}{x-5} dx$	$8 \ln x-5  + c$
284	$\int \frac{3}{7-2x} dx$	$-\frac{3}{2} \ln 7-2x  + c$
285	$\int \frac{3x}{x+5} dx$	$3x - 15 \ln x+5  + c$
286	$\int \frac{x}{4-x} dx$	$-x - 4 \ln 4-x  + c$
287	$\int \frac{x-3}{3x} dx$	$\frac{1}{3}x - \ln x  + c$
288	$\int \frac{7-x}{x+7} dx$	$-x + 14 \ln x+7  + c$
289	$\int \frac{2x+3}{2x+1} dx$	$x + \ln 2x+1  + c$
290	$\int \frac{x^2+1}{x-1} dx$	$\frac{x^2}{2} + x + 2 \ln x-1  + c$
291	$\int \frac{x^2-2x+1}{x} dx$	$\frac{x^2}{2} - 2x + \ln x  + c$
292	$\int \frac{x^2+5x+7}{x+3} dx$	$\frac{x^2+4x}{2} + \ln x+3  + c$
293	$\int \frac{2x^2-2x+1}{3x+2} dx$	$\frac{3x^2-10x}{9} + \frac{29}{27} \ln 3x+2  + c$
294	$\int \frac{x^3+8}{x-2} dx$	$\frac{x^3}{3} + x^2 + 4x + 16 \ln x-2  + c$
295	$\int \frac{4x^3-5x-2}{2x-1} dx$	$\frac{16x^3+12x^2-48x}{24} - 2 \ln 2x-1  + c$
296	$\int \frac{x^4+x^2+1}{x-1} dx$	$\frac{x^4}{4} + \frac{x^3}{3} + x^2 + 2x + 3 \ln x-1  + c$
297	$\int \frac{x^5+2x^4+3x-1}{2x+1} dx$	$\frac{x^5}{10} + \frac{3x^4}{16} - \frac{x^3}{8} + \frac{3x^2}{32} + \frac{45x}{32} - \frac{77}{64} \ln 2x+1  + c$



con denominatore di secondo grado e delta maggiore di zero

298	$\int \frac{1}{4-9x^2} dx$	$\frac{1}{12} \ln \left  \frac{2+3x}{2-3x} \right  + c$
299	$\int \frac{1}{x^2-6x+5} dx$	$\frac{1}{4} \ln \left  \frac{x-5}{x-1} \right  + c$
300	$\int \frac{6x}{2x^2-3} dx$	$\frac{3}{2} \ln  2x^2-3  + c$
301	$\int \frac{4x-7}{x^2-3x+2} dx$	$\ln x-2  + 3 \ln x-1  + c$
302	$\int \frac{5x-2}{x^2+3x} dx$	$\frac{1}{3} (17 \ln x+3  - 2 \ln x ) + c$
303	$\int \frac{x+14}{x^2+x-6} dx$	$\frac{16}{5} \ln x-2  - \frac{11}{5} \ln x+3  + c$
304	$\int \frac{x+1}{x^2-5x+6} dx$	$4 \ln x-3  - 3 \ln x-2  + c$
305	$\int \frac{4x+1}{4x^2-1} dx$	$\frac{1}{4} (\ln 2x+1  + 3 \ln 2x-1 ) + c$
306	$\int \frac{8-5x}{x^2+2x} dx$	$4 \ln x  - 9 \ln x+2  + c$
307	$\int \frac{8-5x^2}{x^2+2x} dx$	$-5x + 4 \ln x  + 6 \ln x+2  + c$
308	$\int \frac{2x^2-x+1}{2x^2+x-1} dx$	$x + \frac{2}{3} \ln x-1  - \frac{2}{3} \ln 2x+1  + c$
309	$\int \frac{x^2-2x-9}{2x^2+5x+2} dx$	$\frac{x}{2} + \frac{1}{3} + \ln x+2  - \frac{31}{12} \ln 2x+1  + c$
310	$\int \frac{3x^2}{x^2+2x-1} dx$	$3x - 3 \ln x^2+2x-1  + \frac{9\sqrt{2}}{4} \ln \left  \frac{x+1-\sqrt{2}}{x+1+\sqrt{2}} \right  + c$
311	$\int \frac{x^3-3x^2}{x^2-4} dx$	$\frac{x^2}{2} - 3x + 5 \ln x+2  - \ln x-2  + c$
312	$\int \frac{x^3+3x^2-3x+1}{x^2+5x+6} dx$	$-10 \ln x+3  + 11 \ln x+2  + \frac{x^2}{2} - 2x + c$
313	$\int \frac{x^4+4}{x^2+3x+2} dx$	$\frac{x^3}{3} - \frac{3}{2}x^2 + 7x - 20 \ln x+5  + 5 \ln x+1  + c$
314	$\int \frac{x^5-7x^4+8x^3+15x^2-26x+13}{x^2-7x+10} dx$	$\frac{x^4}{4} - x^2 + x + \frac{8}{3} \ln x-5  - \frac{5}{3} \ln x-2  + c$

con denominatore di secondo grado e delta uguale a zero

315	$\int \frac{9}{x^2 - 4x + 4} dx$	$-\frac{9}{x-2} + c$
316	$\int \frac{5}{4x^2 + 12x + 9} dx$	$-\frac{5}{4x+6} + c$
317	$\int \frac{-2x}{4x^2 - 12x + 9} dx$	$\frac{3}{4x-6} - \frac{1}{2} \ln 2x-3  + c$
318	$\int \frac{5x}{25x^2 - 10x + 1} dx$	$-\frac{1}{25x-5} + \frac{1}{5} \ln 5x-1  + c$
319	$\int \frac{3x-5}{x^2 + 2x + 1} dx$	$\frac{8}{x+1} + 3 \ln x+1  + c$
320	$\int \frac{2-3x}{x^2 + 4x + 4} dx$	$-\frac{8}{x+2} - 3 \ln x+2  + c$
321	$\int \frac{x+1}{x^2 - 2x + 1} dx$	$-\frac{2}{x-1} + \ln x-1  + c$
322	$\int \frac{6x+1}{9x^2 - 6x + 1} dx$	$-\frac{1}{3x-1} + \frac{2}{3} \ln 3x-1  + c$
323	$\int \frac{-2x-1}{16x^2 + 16x + 4} dx$	$-\frac{1}{16} \ln 16x^2 + 16x + 4  + c$
324	$\int \frac{4x-7}{25x^2 - 40x + 16} dx$	$\frac{19}{125x-100} + \frac{4}{25} \ln 5x-4  + c$
325	$\int \frac{x^2-9}{x^2 + 2x + 1} dx$	$x + \frac{8}{x+1} - 2 \ln x+1  + c$
326	$\int \frac{x^2-2x}{x^2 + 2x + 1} dx$	$x - \frac{3}{x+1} - 4 \ln x+1  + c$
327	$\int \frac{x^2-5x+3}{x^2 - 2x + 1} dx$	$x + \frac{1}{x-1} - 3 \ln x-1  + c$
328	$\int \frac{9x^2 + 6x + 1}{9x^2 - 6x + 1} dx$	$x - \frac{4}{9x-3} + \frac{4}{3} \ln 3x-1  + c$
329	$\int \frac{-2x^2 + 5}{36x^2 + 12x + 1} dx$	$-\frac{1}{18}x - \frac{89}{648x+108} + \frac{1}{54} \ln 6x+1  + c$
330	$\int \frac{x^3 - 1}{x^2 + 14x + 49} dx$	$\frac{x^2}{2} - 14x + \frac{344}{x+7} + 147 \ln x+7  + c$
331	$\int \frac{x^3 - 2x^2 - x + 1}{x^2 + 10x + 25} dx$	$\frac{x^2}{2} - 12x + \frac{169}{x+5} + 94 \ln x+5  + c$

con denominatore di secondo grado e delta minore di zero

332	$\int \frac{5}{5x^2 + 2} dx$	$\frac{\sqrt{10}}{2} \arctan \frac{\sqrt{10} x}{2} + c$
333	$\int \frac{1}{x^2 - 2x + 2} dx$	$\arctan(x - 1) + c$
334	$\int \frac{2}{x^2 + 4x + 5} dx$	$2 \arctan(x + 2) + c$
335	$\int \frac{-5}{x^2 + 2x + 2} dx$	$-5 \arctan(x + 1) + c$
336	$\int \frac{5}{2x^2 - 4x + 3} dx$	$\frac{5\sqrt{2}}{2} \arctan(\sqrt{2} x - \sqrt{2}) + c$
337	$\int \frac{5x}{2x^2 - 4x + 3} dx$	$\frac{5}{4} \ln(2x^2 - 4x + 3) + \frac{5\sqrt{2}}{2} \arctan(\sqrt{2} x - \sqrt{2}) + c$
338	$\int \frac{3x + 5}{x^2 + x + 2} dx$	$\frac{3}{2} \ln(x^2 + x + 2) + \sqrt{7} \arctan \frac{2x + 1}{\sqrt{7}} + c$
339	$\int \frac{x - 7}{x^2 + 3x + 5} dx$	$\frac{1}{2} \ln(x^2 + 3x + 5) - \frac{17}{\sqrt{11}} \arctan \frac{2x + 3}{\sqrt{11}} + c$
340	$\int \frac{3x + 1}{x^2 + 4x + 8} dx$	$\frac{1}{2} \left( 3 \ln(x^2 + 4x + 8) - 5 \arctan \frac{x + 2}{2} \right) + c$
341	$\int \frac{3x - 2}{4x^2 + 2x + 1} dx$	$\frac{3}{8} \ln(4x^2 + 2x + 1) - 11\sqrt{3} \arctan \frac{4\sqrt{3} x + \sqrt{3}}{3} + c$
342	$\int \frac{5x + 9}{x^2 + 2x + 3} dx$	$\frac{5}{2} \ln(x^2 + 2x + 3) + 2\sqrt{2} \arctan \frac{x + 1}{\sqrt{2}} + c$
343	$\int \frac{x^2}{x^2 - 3x + 3} dx$	$x + \frac{3}{2} \ln(x^2 - 3x + 3) + \sqrt{3} \arctan \frac{2\sqrt{3} x - 3\sqrt{3}}{3} + c$
344	$\int \frac{3x^2 - 2}{x^2 + 4x + 8} dx$	$3x - 6 \ln x^2 + 4x + 8  - \arctan \frac{x + 2}{2} + c$
345	$\int \frac{x^2 + 1}{x^2 - 2x + 2} dx$	$x + \ln x^2 - 2x + 2  + \arctan(x - 1) + c$
346	$\int \frac{x^3 - 2x^2 - 2}{4x^2 + 1} dx$	$\frac{x^2}{8} - \frac{1}{2} x - \frac{1}{32} \ln(4x^2 + 1) - \frac{3}{4} \arctan(2x) + c$
347	$\int \frac{x^4 - x^2}{x^2 + 2} dx$	$\frac{x^3}{3} - 3x + 3\sqrt{2} \arctan \frac{\sqrt{2} x}{2} + c$
348	$\int \frac{6x^4 - 5x^3 + 4x^2}{2x^2 - x + 1} dx$	$x^3 - \frac{x^2}{2} + \frac{1}{4} \ln(2x^2 - x + 1) + \frac{\sqrt{7}}{14} \arctan \frac{4\sqrt{7} x - \sqrt{7}}{7} + c$

con denominatore di grado superiore al secondo di vario tipo

349	$\int \frac{x^2 + 5x + 4}{x^3 + 3x^2 + x - 5} dx$	$\ln x - 1  + \arctan(x - 2) + c$
350	$\int \frac{1}{x^2(1+x)^2} dx$	$-\frac{2x+1}{x^2+x} + 2 \ln \left  \frac{x+1}{x} \right  + c$
351	$\int \frac{x^2 + 1}{x^3 - 4x^2 + 5x - 2} dx$	$\ln \frac{ x-2 ^5}{(x-1)^4} + \frac{2}{x-1} + c$
352	$\int \frac{3x+2}{x(x+1)^3} dx$	$\frac{4x+3}{2(x+1)^2} + \ln \frac{x^2}{(x+1)^2} + c$
353	$\int \frac{1}{(x+1)(x^2+1)} dx$	$\frac{1}{2} \ln x+1  - \frac{1}{4} \ln(x^2+1) + \frac{1}{2} \arctan x + c$
354	$\int \frac{2x+10}{(x-2)(x^2+x+1)} dx$	$\ln \frac{(x-2)^2}{x^2+x+1} - 2\sqrt{3} \arctan \frac{2x+1}{\sqrt{3}} + c$
355	$\int \frac{x^2+3x+2}{x(x^2+1)} dx$	$2 \ln x  - \frac{1}{2} \ln(x^2+1) + 3 \arctan x + c$
356	$\int \frac{3x-2}{(x-1)(x^2-2x+2)} dx$	$\ln x-1  - \frac{1}{2} \ln(x^2-2x+2) + 3 \arctan(x-1) + c$
357	$\int \frac{x^2-1}{(x-2)(x^2+1)} dx$	$\frac{1}{5} (3 \ln x-2  + \ln(x^2+1) + 4 \arctan x) + c$
359	$\int \frac{2x^2-1}{x^3-2x^2+x-2} dx$	$\frac{1}{10} [14 \ln x-2  + 3 \ln(x^2+1) + 12 \arctan x] + c$
359	$\int \frac{x-3}{x(x-1)(x-2)} dx$	$-\frac{3}{2} \ln x  + \ln(x-1)^2 - \frac{1}{2} \ln x-2  + c$
360	$\int \frac{x^3+x-2}{(x+1)^2(x^2-x+1)} dx$	$\frac{4}{3(x+1)} + \frac{1}{2} \ln(x^2-x+1) - \frac{1}{3\sqrt{3}} \arctan \frac{2x-1}{\sqrt{3}} + c$
361	$\int \frac{4}{x^3-1} dx$	$\frac{4}{3} \ln x-1  - \frac{2}{3} \ln x^2+x+1  - \frac{4\sqrt{3}}{3} \arctan \frac{2x\sqrt{3}+\sqrt{3}}{3} + c$
362	$\int \frac{x^5+x^4-8}{x^3-4x} dx$	$\frac{x^3}{3} + \frac{x^2}{2} + 4x + \ln \left  \frac{x^2(x-2)^5}{(x-2)^3} \right  + c$
363	$\int \frac{1}{x^6+x^4} dx$	$\frac{1}{x} - \frac{1}{3x^3} + \arctan x + c$
364	$\int \frac{4x^2-8x}{(x-1)^2(x^2+1)^2} dx$	$\frac{3x^2-x}{(x-1)(x^2+1)} + \ln \frac{(x-1)^2}{x^2+1} + \arctan x + c$
365	$\int \frac{x^5+2x^3+5x^2+x+1}{x^2(x^2+1)^2} dx$	$\frac{x^2-1}{x(x^2+1)} + \ln x + \arctan x + c$

366	$\int \frac{2x+1}{(x-2)^3(x-5)} dx$	$\frac{22x-29}{18(x-2)^2} + \frac{11}{27} \ln \left  \frac{5-x}{x-2} \right  + c$
367	$\int \frac{x^2}{(x+2)^2(x+4)^2} dx$	$-\frac{5x+12}{x^2+6x+8} + \ln \left( \frac{x+4}{x+2} \right)^2 + c$
368	$\int \frac{x^2+x+1}{(x+2)(x^2-1)} dx$	$\ln x+2  + \frac{1}{2} \ln \left  \frac{x-1}{x+1} \right  + c$
369	$\int \frac{x}{(x-2)(x^2+2)} dx$	$\frac{1}{3} \ln x-2  - \frac{1}{6} \ln(x^2+2) + \frac{1}{3\sqrt{2}} \arctan \frac{x}{\sqrt{2}} + c$
370	$\int \frac{x^3+3x^2-4x+20}{x^4-16} dx$	$\ln \frac{(x-2)\sqrt{x^2+4}}{x+2} - \frac{1}{2} \arctan \frac{x}{2} + c$
371	$\int \frac{3x^2-7x+6}{(x+1)(x^2-2x+5)} dx$	$\ln \left[ (x+1)^2 \sqrt{x^2-2x+5} \right] - \frac{3}{2} \arctan \frac{x-1}{2} + c$
372	$\int \frac{x+1}{x^2+x+6} dx$	$\frac{1}{2} \ln(x^2+x+6) + \frac{\sqrt{23}}{23} \arctan \left( \frac{\sqrt{23}(2x+1)}{23} \right) + c$
373	$\int \frac{x^3+x-2}{(x+1)(x^3+1)} dx$	$\frac{4}{3(x+1)} + \frac{1}{2} \ln(x^2-x+1) - \frac{1}{3\sqrt{3}} \arctan \frac{2x-1}{\sqrt{3}} + c$
374	$\int \frac{4}{x^4+1} dx$	$\frac{1}{\sqrt{2}} \ln \frac{x^2+\sqrt{2}x+1}{x^2-\sqrt{2}x+1} + \sqrt{2} \arctan \frac{\sqrt{2}x}{1-x^2} + c$
375	$\int \frac{1}{x^2(x^2+2)^2} dx$	$-\frac{1}{8} \frac{3x^2+4}{x(x^2+2)} - \frac{3}{8\sqrt{2}} \arctan \frac{x}{\sqrt{2}} + c$
376	$\int \frac{2x^2-3x-3}{(x-1)(x^2-2x+5)} dx$	$\ln \frac{(x^2-2x+5)\sqrt{x^2-2x+5}}{ x-1 } + \frac{1}{2} \arctan \frac{x-1}{2} + c$
377	$\int \frac{x^3-6}{x^4+6x^2+8} dx$	$\ln \frac{x^2+4}{\sqrt{x^2+4}} + \frac{3}{2} \arctan \frac{x}{2} - \frac{3}{\sqrt{2}} \arctan \frac{x}{\sqrt{2}} + c$
378	$\int \frac{x+3}{x^4-16} dx$	$\frac{5}{32} \ln x-2  - \frac{1}{32} \ln x+2  - \frac{1}{16} \ln(x^2+4) - \frac{3}{16} \arctan \frac{x}{2} + c$
379	$\int \frac{x^4-2x^2+2}{(x^2-2x+2)^2} dx$	$x - \frac{x-3}{x^2-2x+2} + \ln(x^2-2x+2)^2 + \arctan(x-1) + c$
380	$\int \frac{x^5}{(x^3+1)(x^3+8)} dx$	$\frac{1}{21} (\ln(x^3+8)^8 - \ln x^3+1 ) + c$
381	$\int \frac{1}{x^3-4x^2+5x-2} dx$	$-\frac{2x+1}{x^2+x} + \ln \left  \frac{x-2}{x-1} \right  + c$
382	$\int \frac{x^2}{(x-1)^{10}} dx$	$-\frac{1}{9(x-1)^9} - \frac{1}{4(x-1)^8} - \frac{1}{7(x-1)^7} + c$

## esercizi di riepilogo

383	$\int x (x^2 - 4)^3 dx$	$\frac{1}{8} (x^2 - 4)^4 + c$
384	$\int \frac{5}{\cos^2 5x} dx$	$\tan(5x) + c$
385	$\int \frac{2x}{1 + x^2} dx$	$\ln(1 + x^2) + c$
386	$\int \frac{7}{\sqrt{x^7}} dx$	$-\frac{14}{5 x^2 \sqrt{x}} + c$
387	$\int \frac{2x - 1}{x^2 - x + 1} dx$	$\ln x^2 - x + 1  + c$
388	$\int (3 \cos 2x + 2 \sin 2x) dx$	$\frac{3}{2} \sin 2x - \cos 2x + c$
389	$\int \frac{1}{\sqrt{1 - 25 x^2}} dx$	$\frac{1}{5} \arcsin 5x + c$
390	$\int \frac{\arctan^6 x}{1 + x^2} dx$	$\frac{1}{7} \arctan^7 x + c$
391	$\int \frac{x}{1 + 9x^2} dx$	$\ln \sqrt[18]{1 + 9x^2} + c$
392	$\int \frac{1 + \sin 2x}{\cos^2 x} dx$	$\tan x - 2 \ln \cos x  + c$
393	$\int \frac{-5}{\sqrt{1+x}} dx$	$-10 \sqrt{1+x} + c$
394	$\int \frac{\sin x}{\sqrt[3]{\cos^2 x}} dx$	$-3 \sqrt[3]{\cos x} + c$
395	$\int \frac{6x + 1}{x^2 - 2x + 1} dx$	$-\frac{7}{x-1} + \ln(x-1)^6 + c$
396	$\int x e^{2x-5} dx$	$e^{2x-5} \left( \frac{1}{2} x - \frac{1}{4} \right) + c$
397	$\int \frac{\arcsin^5 x}{\sqrt{1-x^2}} dx$	$\frac{1}{6} \arcsin^6 x + c$
398	$\int (x \sqrt{x} - \sqrt[4]{x} + 1) dx$	$\frac{2}{5} x^2 \sqrt{x} - \frac{4}{5} x \sqrt[4]{x} + x + c$

399	$\int e^x \sqrt[4]{e^x - 5} dx$	$\frac{4}{5} (e^x - 5) \sqrt[4]{e^x - 5} + c$
400	$\int \frac{x^3 - 4x^2 + 5}{\sqrt{x}} dx$	$\frac{2}{7} x^3 \sqrt{x} - \frac{8}{5} x^2 \sqrt{x} + 10 \sqrt{x} + c$
401	$\int \sqrt[4]{4 + \sin x} \cos x dx$	$\frac{4}{5} (4 + \sin x) \sqrt[4]{4 + \sin x} + c$
402	$\int \frac{5}{x \ln^5 x} dx$	$-\frac{5}{4 \ln^4 x} + c$
403	$\int \frac{\sqrt[5]{\tan^2 x}}{\cos^2 x} dx$	$\frac{5}{7} \tan x \sqrt[5]{\tan^2 x} + c$
404	$\int \cos^3 x dx$	$\sin x - \frac{1}{3} \sin^3 x + c$
405	$\int \frac{8}{8 + e^x} dx$	$x - \ln(8 + e^x) + c$
406	$\int \sqrt{2x - 9} dx$	$\frac{1}{3} (2x - 9) \sqrt{2x - 9} + c$
407	$\int \frac{x^6 - 1}{x^2 + x + 1} dx$	$\frac{x^5}{5} - \frac{x^4}{4} + \frac{x^2}{2} - x + c$
408	$\int \frac{x^2 - 2x}{(x - 1)^2} dx$	$-\frac{x^2 - 2x}{x - 1} + c$
409	$\int \left( 2\sqrt{x} - \frac{1}{\sqrt{x}} \right) dx$	$\frac{4}{3} x \sqrt{x} - 2\sqrt{x} + c$
410	$\int \frac{x - 9}{\sqrt{x^2 - 2x + 4}} dx$	$\sqrt{x^2 - 2x + 4} - 8 \ln \left  \sqrt{x^2 - 2x + 4} + x - 1 \right  + c$
411	$\int (1 - \cos x)^2 dx$	$\frac{3}{2} x - 2 \sin x + \frac{1}{4} \sin 2x + c$
412	$\int x^2 (x^3 + 9)^4 dx$	$\frac{1}{15} (x^3 + 9)^5 + c$
413	$\int \frac{2x^3}{1 + x^8} dx$	$\frac{1}{2} \arctan x^4 + c$
414	$\int \frac{1}{x(1 + \ln x)} dx$	$\ln 1 + \ln x  + c$

415	$\int \frac{3x-1}{\sqrt[3]{x^2}} dx$	$\frac{9}{4} x \sqrt[3]{x} - 3 \sqrt[3]{x} + c$
416	$\int (x + \sin 2x)^2 (1 + 2 \cos 2x) dx$	$\frac{1}{3} (x^3 + 3x^2 \sin 2x + 3x \sin^2 2x + \sin^3 2x) + c$
417	$\int \left( x^{\frac{2}{3}} - x^{\frac{4}{5}} \right) dx$	$\frac{3}{5} x^{\frac{5}{3}} - \frac{5}{9} x^{\frac{9}{5}} + c$
418	$\int \left( x^3 + \frac{1}{x} - \frac{4}{x^2} \right) dx$	$\frac{x^4}{4} + \frac{4}{x} + \ln x  + c$
419	$\int \frac{1 - \sin x}{1 - \cos x} dx$	$-\tan^{-1}\left(\frac{x}{2}\right) - \ln 1 - \cos x  + c$
420	$\int \frac{2 + x^2}{1 + x^2} dx$	$x + \arctan x + c$
421	$\int \frac{6x-1}{\cos^2(3x^2-x+1)} dx$	$\tan(3x^2-x+1) + c$
422	$\int \frac{x^5-1}{x-1} dx$	$\frac{x^5}{5} + \frac{x^4}{4} + \frac{x^3}{3} + \frac{x^2}{2} + x + c$
423	$\int \frac{e^{3x}+1}{e^x} dx$	$-\frac{e^{3x}+1}{e^x} + \frac{3}{2} e^{2x} + c$
424	$\int \frac{2x}{1+(1+x^2)^2} dx$	$\arctan(1+x^2) + c$
425	$\int \frac{3-2\sin^3 x}{\sin^2 x} dx$	$2 \cos x - \frac{3 \cos x}{\sin x} + c$
426	$\int \frac{1}{1-\sqrt{x+7}} dx$	$-2(\sqrt{x+7} + \ln 1-\sqrt{x+7} ) + c$
427	$\int (x + \sin 2x) dx$	$\frac{1}{2} (x^2 - \cos 2x) + c$
428	$\int \frac{x\sqrt{x} - \sqrt[4]{x} + 1}{\sqrt{x}} dx$	$\frac{1}{2} x^2 - \frac{4}{3} \sqrt[4]{x^3} + 2\sqrt{x} + c$
429	$\int \frac{5}{x \ln 4x} dx$	$5 \ln \ln 4x  + c$
430	$\int \ln(5x-2) dx$	$\frac{-5x + (5x-2)\ln(5x-2)}{5} + c$
431	$\int x^2 2^{x^3} dx$	$\frac{\log_2 e}{3} 2^{x^3} + c$





432	$\int \frac{x+1}{1+9x^2} dx$	$\frac{1}{18} \ln(1+9x^2) + \frac{1}{3} \arctan(3x) + c$
433	$\int (\sin^3 x + 5 \sin x) dx$	$-6 \cos x + \frac{1}{3} \cos^3 x + c$
434	$\int \frac{1}{x \log^5 x} dx$	$\frac{\ln 10 \ln \ln x }{5} + c$
435	$\int \tan 3x dx$	$-\frac{1}{3} \ln \cos 3x  + c$
436	$\int e^{2x} \sqrt[3]{4+e^{2x}} dx$	$\frac{3}{8} (e^{2x} + 4) \sqrt[3]{e^{2x} + 4} + c$
437	$\int \frac{2x^2 + 3x - \sqrt{x}}{\sqrt[3]{x^2}} dx$	$\frac{6}{7} x^2 \sqrt[3]{x} + \frac{9}{4} x \sqrt[3]{x} - \frac{6}{5} \sqrt[6]{x^5} + c$
438	$\int \frac{6}{x \sqrt[3]{1+3 \ln x}} dx$	$3(1+3 \ln x) \sqrt[3]{1+3 \ln x} + c$
439	$\int \frac{3x-4}{25x^2-10x+1} dx$	$\frac{17}{125x-25} + \frac{3}{25} \ln 5x-1  + c$
440	$\int \frac{1}{(1+x^2) \arctan x} dx$	$\ln \arctan x  + c$
441	$\int \frac{x}{x^4-2x^2+1} dx$	$-\frac{1}{2x^2-2} + c$
442	$\int \frac{\ln^2 x + \ln x + 1}{x} dx$	$\frac{3}{2} \ln^2 x + \ln x + c$
443	$\int (\cos^3 x - \sin^3 x) dx$	$\sin x + \cos x - \frac{\sin^3 x + \cos^3 x}{3} + c$
444	$\int \frac{2x^2+5}{x+1} dx$	$x^2 - 2x + 7 \ln x+1  + c$
445	$\int \frac{e^{7+\sqrt{x}}}{\sqrt{x}} dx$	$2e^{7+\sqrt{x}} + c$
446	$\int \frac{x^5+4x^3+5x}{x^2+5} dx$	$\frac{1}{4} (x^4 - 2x^2 - 35) + 5 \ln(x^2+5) + c$
447	$\int \left( 4 \sqrt[3]{x^2} - \frac{2}{3} \sqrt[5]{x^4} + 5 \sqrt{x+6} - \frac{2}{\sqrt{x}} \right) dx$	$\frac{12}{5} x \sqrt[3]{x^2} - \frac{10}{27} x \sqrt[5]{x^4} + \frac{10}{3} (x+6) \sqrt{x+6} + c$
448	$\int \frac{1}{\sin^2 x \cdot \cot^3 x} dx$	$\frac{1}{2 \cos^2 x} + c$

449	$\int \sqrt{2x} + \sqrt[3]{x-2} dx$	$\frac{2}{3} x \sqrt{2x} + \frac{3}{4} (x-2) \sqrt[3]{x-2} + c$
450	$\int \ln \frac{x}{\sqrt{4-x^2}} dx$	$x \cdot \ln \frac{x}{\sqrt{4-x^2}} + \ln \left  \frac{2-x}{2+x} \right  + c$
451	$\int \frac{x^4 + 4x^2 + 1}{x^2 - 2x} dx$	$\frac{x^3}{3} + x^2 + 8x - \frac{1}{2} \ln x  + \frac{33}{2} \ln x-2  + c$
452	$\int \frac{x^2}{x^6 + 2x^3 + 1} dx$	$-\frac{1}{3(x^3 + 1)} + c$
453	$\int x \sqrt[5]{x^2 + 4} dx$	$\frac{5}{12} (x^2 + 4) \sqrt[5]{x^2 + 4} + c$
454	$\int \frac{2x + 1}{x^3 + x^2} dx$	$-\frac{1}{x} + \ln x  - \ln x+1  + c$
455	$\int \frac{\ln^2 x + 1}{x \ln x} dx$	$\ln \ln x  + 2 \ln x + c$
456	$\int \frac{\arctan x}{x^2} dx$	$\ln x  - \frac{1}{2} \ln(1+x^2) - \frac{\arctan x}{x} + c$
457	$\int \frac{x + 1 + \sqrt[3]{x^2}}{\sqrt[4]{x}} dx$	$\frac{4}{7} x \sqrt[4]{x^3} + \frac{4}{3} \sqrt[4]{x^3} + \frac{12}{17} x \sqrt[12]{x^5} + c$
458	$\int \frac{\sqrt{e^x}}{1 + \sqrt{e^x}} dx$	$2 \ln(1 + \sqrt{e^x}) + c$
459	$\int \frac{7x + 4}{x^2 + 2x + 5} dx$	$\frac{7}{2} \ln(2x^2 + 2x + 5) - \frac{3}{2} \arctan \frac{x+1}{2} + c$
460	$\int \arctan(\sqrt{x} + 1) dx$	$\ln(x + 2\sqrt{x} + 2) + x \cdot \arctan(\sqrt{x} + 1) - \sqrt{x} + c$
461	$\int \frac{\ln \ln x}{x} dx$	$\ln x [\ln(\ln x) - 1] + c$
462	$\int \frac{1}{\sin x \cos x} dx$	$\ln \tan x  + c$
463	$\int \sqrt{4-x^2} dx$	$2 \arcsin\left(\frac{x}{2}\right) + \frac{x\sqrt{4-x^2}}{2} + c$
464	$\int \sqrt[4]{1 + \sin^2 x} \cdot \sin 2x dx$	$\frac{4}{5} (1 + \sin^2 x) \sqrt[4]{1 + \sin^2 x} + c$
465	$\int \frac{5x - 2}{x^2 - 6x + 8} dx$	$9 \ln x-4  - 4 \ln x-2  + c$

466	$\int x \tan x^2 dx$		$-\frac{1}{2} \ln \cos x^2  + c$
467	$\int \frac{1}{3x\sqrt{1-\ln^2 x}} dx$		$\frac{1}{3} \arcsin(\ln x ) + c$
468	$\int 2x \arctan x dx$		$(x^2 + 1) \arctan x - x + c$
469	$\int \frac{2x}{x^3 - 8} dx$		$\frac{\sqrt{3} \arctan\left(\frac{\sqrt{3}(x+1)}{3}\right)}{3} - \frac{\ln(x^2+2x+4)}{6} + \frac{\ln x-2 }{3} + c$
470	$\int \cos(2x) e^{4x} dx$		$e^{4x} \left(\frac{\cos 2x}{5} + \frac{\sin 2x}{10}\right) + c$
471	$\int \frac{x^2 + 3x + 4}{x^2 + 4x + 5} dx$		$x - \frac{1}{2} \ln(x^2 + 4x + 5) + \arctan(x + 2) + c$
472	$\int \frac{2e^{2x} - \frac{1}{e^x}}{e^{2x} + \frac{1}{e^x}} dx$		$-x + \ln(e^{3x} + 1) + c$
473	$\int \frac{3x}{\tan(x^2 + 1)} dx$		$\frac{3}{2} \ln \sin(x^2 + 1)  + c$
474	$\int \frac{x - 3}{\sqrt{1 - x^2}} dx$		$-\sqrt{1 - x^2} - 3 \arcsin x + c$
475	$\int \frac{x}{\cos^2 x} dx$		$x \tan x + \ln \cos x  + c$
476	$\int \sqrt{e^x - 1} dx$	porre $e^x - 1 = t$	$2\sqrt{e^x - 1} - 2 \arctan(\sqrt{e^x - 1}) + c$
477	$\int \frac{2^x}{1 - 4^x} dx$	porre $2^x = t$	$-\frac{1}{2 \ln 2} \ln \left  \frac{2^x - 1}{2^x + 1} \right  + c$
478	$\int \frac{1}{\sin x} dx$	porre $\sin x = 2 \sin \frac{x}{2} \cos \frac{x}{2}$	$\ln \left  \tan \frac{x}{2} \right  + c$
479	$\int \ln(1 + x) dx$		$(x + 1) \ln 1 + x  - x + c$
480	$\int \frac{3x}{2x^2 + x + 1} dx$		$\frac{3}{4} \ln(2x^2 + x + 1) - \frac{3\sqrt{7}}{14} \arctan \frac{\sqrt{7}}{7}(4x + 1) + c$
481	$\int \sin x \sqrt{\cos x} dx$		$-\frac{2}{3} \cos x \sqrt{\cos x} + c$

## esercizi di riepilogo più impegnativi

482	$\int x \cos(\ln x) dx$	$\frac{2}{5} x^2 \left[ \cos(\ln x) + \frac{1}{2} \sin(\ln x) \right] + c$
486	$\int \frac{3x^3 - 4x + 5}{3x^2 + 4} dx$	$\frac{1}{2} x^2 - \frac{4}{3} \ln(3x^2 + 4) + \frac{5\sqrt{3}}{6} \arctan \frac{\sqrt{3}}{2} x + c$
484	$\int \arcsin \sqrt{x} dx$	$\left(x - \frac{1}{2}\right) \arcsin \sqrt{x} + \frac{1}{2} \sqrt{x - x^2} + c$
485	$\int \frac{1}{2 + 3 \sin x} dx$	$\frac{\sqrt{5}}{5} \ln \left  \frac{2 \tan \frac{x}{2} + 3 - \sqrt{5}}{2 \tan \frac{x}{2} + 3 + \sqrt{5}} \right  + c$
486	$\int \sqrt{e^x + 1} dx$	$2 \sqrt{e^x + 1} + \ln \frac{\sqrt{e^x + 1} - 1}{\sqrt{e^x + 1} + 1} + c$
487	$\int \frac{x^2 + 5x + 4}{x^3 + 3x^2 + x - 5} dx$	$\ln x - 1  + \arctan(x + 2) + c$
488	$\int \frac{1}{\sin^2 x \cos^2 x} dx$	$\tan x - \cot x + c$
489	$\int e^{2x} (x^2 + 1)^2 dx$	$\frac{e^{2x}}{2} \left( x^4 - 2x^3 + 5x^2 - 5x + \frac{7}{2} \right) + c$
490	$\int \frac{\arcsin x}{\sqrt{1+x}} dx$	$2 \arcsin x \sqrt{1+x} + 4 \sqrt{1-x} + c$
491	$\int \frac{\sin x \cdot \ln \sin x}{1 - \sin^2 x} dx$	$\frac{\ln \sin x}{\cos x} - \ln \left  \tan \frac{x}{2} \right  + c$
492	$\int \frac{\arctan x}{(1+x)^2} dx$	$\frac{\arctan x}{2} - \frac{\arctan x}{1+x} + \frac{1}{2} \ln 1+x  - \frac{1}{4} \ln(1+x^2) + c$
493	$\int \sin^5 x \cos^2 x dx$	$-\frac{1}{7} \cos^7 x + \frac{2}{5} \cos^5 x - \frac{1}{3} \cos^3 x + c$
464	$\int \frac{1}{x} \sqrt{\frac{1-x}{1+x}} dx$	$2 \arctan \sqrt{\frac{1-x}{1+x}} + \ln \frac{\sqrt{1+x} - \sqrt{1-x}}{\sqrt{1+x} + \sqrt{1-x}} + c$
495	$\int \sin x \cdot \ln \tan x dx$	$-\cos x \cdot \ln \tan x + \ln \tan \frac{x}{2} + c$
496	$\int x e^x \cos x dx$	$\frac{e^x}{2} (x \sin x + x \cos x - \sin x) + c$
497	$\int \ln^2 (x + \sqrt{1+x^2}) dx$	$2x + x \ln^2 (x + \sqrt{1+x^2}) - 2 \sqrt{1+x^2} \ln (x + \sqrt{1+x^2}) + c$

498	$\int \frac{x^2}{\sqrt{(x^2-1)^3}} dx$		$-\frac{x}{\sqrt{x^2-1}} + \ln x + \sqrt{x^2-1}  + c$
499	$\int \csc^5 5x dx$		$-\frac{\cos 5x}{20 \sin^4 5x} - \frac{3 \cos 5x}{40 \sin^2 5x} - \frac{3}{40} \ln \left  \frac{1 + \cos 5x}{\sin 5x} \right  + c$
500	$\int \frac{\sec^2 x}{\sqrt{\tan^2 x + 4 \tan x + 1}} dx$		$\ln  \tan x + 2 + \sqrt{\tan^2 x + 4 \tan x + 1}  + c$
501	$\int \frac{2^{x-1}}{2^{2x+2}} dx$		$-(2^{-x-3}) \log_2 e + c$
502	$\int \cos 2x \sqrt{3 - \sin 2x} dx$		$-\frac{1}{3} (3 - \sin 2x) \sqrt{3 - \sin 2x} + c$
503	$\int x \arctan^2 x dx$		$\left(\frac{x^2+1}{2}\right) \arctan^2 x - x \arctan x + \frac{1}{2} \ln(1+x^2) + c$
504	$\int \frac{x^2 - 6x + 1}{x^2 - 7x} dx$		$x + \ln \sqrt[7]{\frac{(x-7)^8}{ x }} + c$
505	$\int \frac{1 + \sin x}{1 + \cos x} e^x dx$		$e^x \tan \frac{x}{2} + c$
506	$\int \cos 5x \sin 2x dx$		$-\frac{1}{14} \cos 7x + \frac{1}{6} \cos 3x + c$
507	$\int \frac{e^{3x}}{e^{2x} + 6e^x + 5} dx$		$e^x + \frac{1}{4} [\ln(e^x + 1) - 25 \ln(e^x + 5)] + c$
508	$\int \frac{\ln x}{\sqrt[4]{x}} dx$		$\frac{4}{9} \sqrt[4]{x^3} (3 \ln x - 4) + c$
509	$\int x \arccos(5x - 2) dx$		$\left(\frac{x^2}{2} - \frac{9}{100}\right) \arccos(5x - 2) - \frac{5x+6}{100} \sqrt{-25x^2 + 20x - 3} + c$
510	$\int \frac{1 + \sqrt{x}}{1 + x + \sqrt{x}} dx$		$2\sqrt{x} - \frac{4}{\sqrt{3}} \arctan \frac{2\sqrt{x} + 1}{\sqrt{3}} + c$
511	$\int \frac{\ln^2 x}{x(\ln^2 x - 9)} dx$		$\ln x - \frac{3}{2} \ln \ln x + 3  + \frac{3}{2} \ln \ln x - 3  + c$
512	$\int \frac{x+1}{2\sqrt{-x^2-3x-2}} dx$	porre $x-1 = t^2(2-x)$	 $\frac{5}{2} \arctan \sqrt{\frac{x-1}{2-x}} - \frac{2-x}{2} \sqrt{\frac{x-1}{2-x}} + c$
513	$\int \frac{\sqrt{2-x^2}}{1-x^2} dx$	porre $x = \sqrt{2} \cos t$	 $\frac{1}{2} \ln \left  \frac{1-x^2}{1+x\sqrt{2-x^2}} \right  + \arccos \frac{x}{\sqrt{2}} + c$

## Soluzioni degli integrali immediati generalizzati

57	$\frac{(x^2 + 3)^6}{12} + c$	58	$\frac{1}{4} \ln x^4 - 3  + c$
59	$\frac{(7 + e^x)^5}{5} + c$	60	$\frac{e^{x^4}}{4} + c$
61	$2 e^{\sqrt{x}} + c$	62	$\frac{1}{4} (x^2 + 7)^2 + c$
63	$\frac{\ln^5 x}{5} + c$	64	$\frac{1}{16} (2x - 9)^8 + c$
65	$\ln(3x^2 - x + 1) + c$	66	$\ln(x^2 + x + 5) + c$
67	$\frac{e^{4x-2}}{4} + c$	68	$\frac{1}{2} e^{x^2} + c$
69	$\frac{(x + 2)^8}{8} + c$	70	$\frac{1}{5} e^{5x-2} + c$
71	$\frac{1}{7} \ln^7 x + c$	72	$\frac{1}{3} \ln 3x + 5  + c$
73	$\frac{1}{10} (x^2 + 1)^5 + c$	74	$\frac{1}{9} (x + 1)^9 + c$
75	$\frac{1}{4} (5 + e^x)^4 + c$	76	$-\frac{7}{5} e^{5-x^5} + c$
77	$\frac{1}{3} \ln x^3 + 1  + c$	78	$\frac{1}{2} \sqrt{1 + x^4} + c$
79	$\frac{2}{9} (2 - 3x + 7x^3) \sqrt{(2 - 3x + 7x^3)} + c$	80	$-\frac{3}{10} \sqrt[3]{(8 - 5 \ln x)^2} + c$
81	$3 e^{2x} + c$	82	$\frac{1}{6} e^{6x} + c$

83	$\frac{2}{3} \sqrt{1+x^3} + c$	84	$\frac{(7x-7)^8}{56} + c$
85	$2\sqrt{\ln x} + c$	86	$-\frac{1}{8(x^2+a^2)^4} + c$
87	$\frac{(x^2-5)^6}{4} + c$	88	$\frac{1}{2} \ln(2e^x+1) + c$
89	$-\frac{9}{8} \sqrt[3]{(7-4\ln x)^2} + c$	90	$-\frac{e^{3-\pi x}}{3} + c$
91	$-\frac{(6-6x)^7}{42} + c$	92	$\frac{(x^4-x^2+3)^6}{12} + c$
93	$\frac{(x^2-5)^4}{8} + c$	94	$\frac{1}{18} \ln^6 x + c$
95	$\frac{1}{3} (x^4-2x)\sqrt{x^4-2x} + c$	96	$-\frac{2}{3} (5-x)\sqrt{5-x} + c$
97	$\frac{1}{2} \ln^2(x-2) + c$	98	$\frac{2}{3} \ln 5+3x  + c$
99	$2\sqrt{x^2-x-5} + c$	100	$-\frac{3}{2} \sqrt[3]{(x+6)^2} + c$
101	$\frac{1}{2} \ln^2(x^2+7-x^3) + c$	102	$\frac{1}{6} \ln^6(x-2) + c$
103	$2 \ln(\sqrt{x}+2) + c$	104	$\ln 2x+e^x  + c$
105	$\ln e^x - e^{-x}  + c$	106	$\frac{1}{2} e^{x^2} + c$
107	$-e^{5-x} + c$	108	$\ln \ln x  + c$

## funzioni goniometriche

109	$\frac{\sin^5 x}{5} + c$	110	$\frac{\tan^5 x}{5} + c$
111	$\frac{1}{6} \sin^6 x + c$	112	$\frac{\arcsin 3x}{3} + c$
113	$\arctan e^x + c$	114	$-\frac{\cot x^2}{2} + c$
115	$\frac{\arctan^4 x}{4} + c$	116	$\frac{\tan x^3}{3} + c$
117	$-\frac{2}{3} (2 + \cot x) \sqrt{2 + \cot x} + c$	118	$\sin e^x + c$
119	$-\frac{\cos(6x + 3)}{6} + c$	120	$-\frac{1}{5} \ln \cos(5x - 2)  + c$
121	$\ln(3x - \cos x) + c$	122	$\frac{\arcsin x^4}{4} + c$
123	$-\frac{2}{3} (1 + \cos x) \sqrt{1 + \cos x} + c$	124	$-\cos(\ln x) + c$
125	$\frac{\arctan x^4}{4} + c$	126	$2 \arctan \sqrt{x} + c$
127	$e^{\sin x} + c$	128	$\sqrt{1 + \sin^2 x} + c$
129	$-\frac{1}{5} \cos(5x + 4) + c$	130	$2 \arcsin x \log_2 e + c$
131	$\frac{1}{3} \arcsin^3 x + c$	132	$-\cot \sin x + c$
133	$\arcsin(\ln x) + c$	134	$\frac{1}{8} \arctan^8 x + c$



135	$-\frac{1}{2 \sin^2 x} + c$	136	$\arctan \sin x + c$
137	$-\frac{1}{2} \cos(3 + x^2) + c$	138	$e^{\arctan x} + c$
139	$-\cos(x^2 + 5x) + c$	140	$\ln x + \cos x  + c$
141	$\frac{1}{7} \sin(7x + 3) + c$	142	$\arcsin e^x + c$
143	$\frac{1}{2} \arctan x^2 + c$	144	$\frac{2}{3} (3 + \sin x)^{\frac{3}{2}} + c$
145	$\frac{1}{4} \sin 4x + c$	146	$-\frac{3}{5} \cos 5x + c$
147	$\sin \ln x + c$	148	$\frac{1}{3} \arcsin x^3 + c$
149	$\frac{1}{\sqrt{5}} \arctan \frac{\sin x}{\sqrt{5}} + c$	150	$\frac{1}{4} \tan^4 x + c$
151	$\frac{1}{2} \arcsin 2x + c$	152	$\frac{2}{3} \arctan x^3 + c$
153	$-\frac{2}{3} (1 - \sin x) \sqrt{1 - \sin x} + c$	154	$-\cos e^x + c$
155	$-\ln 1 + \cos x  + c$	156	$\frac{1}{2} \tan x^2 + c$
157	$-\frac{1}{2} \arcsin^2(1 - 2x) + c$	158	$\frac{2}{3} (\tan x) \sqrt{\tan x} + c$
159	$\frac{\arcsin^5 x}{5} + c$	160	$-\frac{1}{2} \ln  \cos(2x + 3)  + c$

161	$e^{\arcsin x} + c$	162	$2 \arctan \sqrt{x} + c$
163	$-\sqrt{1 + \cos^2 x} + c$	164	$3 \arctan \sqrt[3]{x} + c$
165	$10 \arctan \sqrt{x} + c$	166	$2 \arctan \sqrt{a+x} + c$
167	$\frac{1}{3} \arctan \frac{\ln x}{3} + c$	168	$\frac{1}{2} \sin^2 x + c$
169	$-\frac{1}{7} \cos^7 x + c$	170	$\frac{1}{2} (1 - \cos x)^2 + c$
171	$-\frac{5}{3} \cot^3 x + c$	172	$\frac{1}{2} (1 + \tan x)^2 + c$
173	$\ln \arctan x  + c$	174	$-\ln \cos x  + c$
175	$\ln \sin x  + c$	176	$\frac{1}{14} \ln(7 \sin^2 x + 7) + c$
177	$\ln \sin x - \cos x  + c$	178	$\frac{1}{2} a \sin x^2 + c$
179	$\frac{1}{\sqrt{3}} \arctan \sqrt{3} x + c$	180	$\frac{1}{3} \sin 3x + c$
181	$\arctan \ln x + c$	182	$\frac{1}{4} \sin x^4 + c$
183	$\cos \ln x + c$	184	$-\sin \frac{1}{x} + c$
185	$\frac{1}{4} \tan^4 x + c$	186	$\frac{\sqrt{2}}{4} \arctan \frac{\sqrt{2}}{4} x + c$