

Math 8 Practice Integration

- $\int x^2(x^3 - 1)^4 dx$
- $\int \frac{1}{3x^2} dx$
- $\int t^2 \left(t + \frac{2}{t} \right) dt$
- $\int x \cos(x^2) dx$
- $\int x \sqrt{2x+1} dx$
- $\int \frac{\sin x}{\cos^2 x} dx$
- $\int_0^2 x \sqrt{4+x^2} dx$
- $\int_{\pi/3}^{\pi/2} (x + \cos x) dx$
- $\int_0^{\pi/2} \sin(2x) dx$
- $\int_0^{\pi/4} \tan^2 x \sec^2 x dx$
- $\int_1^2 \frac{x^2 - 3x + 4}{\sqrt{x}} dx$
- $\int_4^1 x(\sqrt{x} - 3) dx$
- $\int x^2(3x^3 - 1) dx$
- $\int_0^3 \sqrt{x+1} dx$
- $\int_{-1}^1 \frac{2x}{(4+x^2)^2} dx$
- $\int_{-3}^{-1} \frac{1}{(2-3t)^3} dt$
- $\int_7^{10} \frac{x}{\sqrt{x-6}} dx$
- $\int_1^5 \frac{x^4 - 16}{x^2 + 4} dx$
- $\int_0^1 \frac{x+3}{\sqrt{x^2+6x+2}} dx$
- $\int_0^{\pi/3} \frac{\sin \theta}{\cos^2 \theta} d\theta$
- $\int_0^4 \frac{dx}{(x+2)^3}$
- $\int 5x^4 dx$
- $\int \sin x dx$
- $\int \sec x \tan x dx$
- $\int 2 \sin x \cos x dx$
- $\int x\sqrt{1-x^2} dx$
- $\int 3 \sec^2 x \tan x dx$
- $\int \csc^2 x dx$
- $\int \sqrt{1-\cos x} \sin x dx$
- $\int \frac{\sin \sqrt{x}}{\sqrt{x}} dx$
- $\int \sqrt{x^2+1} 3x dx$
- $\int x^2 \sin(2x^3 - 2) dx$
- $\int x^2(2-x) dx$
- $\int_0^1 (1-3x^2) dx$
- $\int_1^2 \frac{1}{x^2} dx$

36. $\int \cos(\pi x) dx$
37. $\int (x+1)^{10} dx$
38. $\int \frac{x^4}{(2+x^5)^6} dx$
39. $\int \frac{x^2-x}{\sqrt{x}} dx$
40. $\int_{-1}^1 |x| dx$
41. $\int \frac{d}{dx} (\sec x \tan x) dx$
42. $\int x\sqrt{x^2-1} dx$
43. $\int_0^1 \pi dx$
44. $\int_0^{\frac{\pi}{8}} \sin(4x) dx$
45. $\int_0^{\frac{\pi}{4}} \sec^2(x) dx$
46. $\int_0^4 \frac{1}{\sqrt{2x+1}} dx$
47. $\int_0^{\pi} \frac{\cos x}{\sqrt{1+\sin x}} dx$
48. $\int_0^{\frac{\pi}{2}} \frac{\cos x}{\sqrt{1+\sin x}} dx$
49. $\frac{d}{dx} \left[\int_0^x r^2 dr \right]$
50. $\frac{d}{dx} \left[\int_0^{x^2} r^2 dr \right]$
51. $\int 5 dx$
52. $\int \left(2 - \frac{5}{x^2}\right) dx$
53. $\int \frac{2x^3+3}{x^2} dx$
54. $\int \sqrt{x+1} dx$
55. $\int x\sqrt{x^2+1} dx$
56. $\int x \cos(x^2) dx$
57. $\int \frac{\cos x}{(\sin x)^3} dx$
58. $\int \sec^2 x dx$
59. $\int (x^2-1)(x^3-3x)^4 dx$
60. $\int \frac{2x^3}{\sqrt[3]{x^2+1}} dx$
61. $\int \sin x \cos^2 x dx$
62. $\int \frac{2x^2}{\sqrt{x^3+1}} dx$
63. $\int (5x^4 - 6x^2 + 14) dx$
64. $\int \sqrt[3]{x^2} dx$
65. $\int (\cos x + 2 \sin x) dx$
66. $\int \left(x + \frac{1}{x}\right)^2 dx$
67. $\int \sqrt{x-3} dx$
68. $\int (2x-1)^{50} dx$
69. $\int x(x^2+2)^{3/2} dx$
70. $\int \frac{1}{(1-3x)^4} dx$
71. $\int \cos(4-5x) dx$
72. $\int x^2 \sin(x^3) dx$