

4MA 2

ASR
ex 3 A

$$x^2 + x + \frac{1}{x} + c \quad \int (4x + 3) dx$$

$$2x^2 + 3x + c \quad \int (9t^2 - 4t + 3) dt$$

$$3t^3 - 2t^2 + 3t + c \quad \int (4x^2 - 8x + 1) dx$$

$$\frac{4x^3}{3} - 4x^2 + x + c \quad \int \left(\frac{1}{z^3} - \frac{3}{z^2} \right) dz$$

$$-\frac{1}{2z^2} + \frac{3}{z} + c \quad \int (3x - 1)^2 dx$$

$$\frac{1}{9} (3x - 1)^3 + c \quad \int (3x - 1)^3 dx$$

$$\frac{1}{12} (3x - 1)^4 + c \quad \int (3x - 1)^7 dx$$

$$\frac{1}{24} (3x - 1)^8 + c \quad \int x(2x + 3) dx$$

$$\frac{2}{3} x^3 + \frac{3}{2} x^2 + c \quad \int \frac{3}{4} \cos(u) du$$

$$\frac{3}{4} \sin(u) + c \quad \int -\frac{1}{5} \sin(x) dx$$

4MAZ
ASR
ex 3 A)

$$\frac{1}{5} \cos(x) + c \quad \int a^2 dx$$

$$a^2 x + c \quad \int (b - a^2) du$$

$$(b - a^2)u + c \quad \int 3x^4 dx$$

$$\frac{3x^5}{5} + c \quad \int (x^3 - 5x^2 + 3x - 2) dx$$

$$\frac{x^4}{4} - \frac{5x^3}{3} + \frac{3x^2}{2} - 2x + c \quad \int (x^2 - 5x + 6) dx$$

$$\frac{x^3}{3} - \frac{5x^2}{2} + 6x + c \quad \int ((x + 1)^8 + 1) dx$$

$$\frac{1}{9} (x + 1)^9 + x + c \quad \int (2 - x)^{13} dx$$

$$-\frac{1}{14} (2 - x)^{14} + c \quad \int 6x(3x^2 + 1)^2 dx$$

$$\frac{1}{3} (3x^3 + 1)^3 + c \quad \int \frac{1}{(x - 1)^2} dx$$

$$-\frac{1}{x - 1} + c \quad \int \left(2x + 1 - \frac{1}{x^2}\right) dx$$

4 MAZ

ASR
ex 3B

$2(6a^5 + b)$	$\int_{-2}^1 (x^3 - 3x + 2) dx$
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$\frac{27}{4}$	$\int_0^2 (1 - t)^3 dt$
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0	$\int_{-1}^1 (2 + 3x^2 - 5x^4) dx$
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4	$\int_0^1 x^2 (2x + 1)^2 dx$
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$\frac{32}{15}$	$\int_0^1 \frac{v^2}{(v^3 + 1)^2} dv$
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$\frac{1}{6}$	$\int_1^2 \left(\frac{1}{\sqrt{x}} - \frac{1}{x^2} \right) dx$
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$2\sqrt{2}$	$\int_0^3 \sqrt{1 + x^2} dx$
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$\frac{14}{3}$	$\int_{-1}^0 2x(1 + x^2)^2 dx$
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$-\frac{7}{3}$	$\int_0^{\pi/4} \frac{(1 + \tan(x))^2}{\cos^2(x)} dx$
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$\frac{7}{3}$	$\int_{\pi/2}^{3\pi/2} \sin^2(x) \cos(x) dx$
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4MA2
ASR
ex 3B

$-\frac{2}{3}$	$\int_0^4 x\sqrt{x^2+9}dx$
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$\frac{98}{3}$	$\int_{1/4}^4 \left(\frac{1}{\sqrt{x}} - \sqrt{x}\right) dx$
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$-\frac{9}{4}$	$\int_{-\pi/2}^{\pi/4} \cos(3x)dx$
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$\frac{\sqrt{2}}{6} - \frac{1}{3}$	$\int_{1/2}^2 \frac{x^2+1}{x^2} dx$
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3	$\int_2^3 \left(\frac{1}{(x-1)^2} - \frac{1}{(x+1)^2}\right) dx$
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$\frac{5}{12}$	$\int_{-2}^{-1} \frac{3}{(4x+1)^3} dx$
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$-\frac{5}{147}$	$\int_1^2 \frac{x^3+2}{x^2} dx$
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$\frac{5}{2}$	$\int_0^2 \frac{5x^2}{\sqrt{x^3+1}} dx$
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$\frac{20}{3}$	$\int_{\pi/2}^{3\pi/2} 2\sin^3(3x)\cos(3x)dx$
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0	$\int_1^3 (6a^5 + b) dx$
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