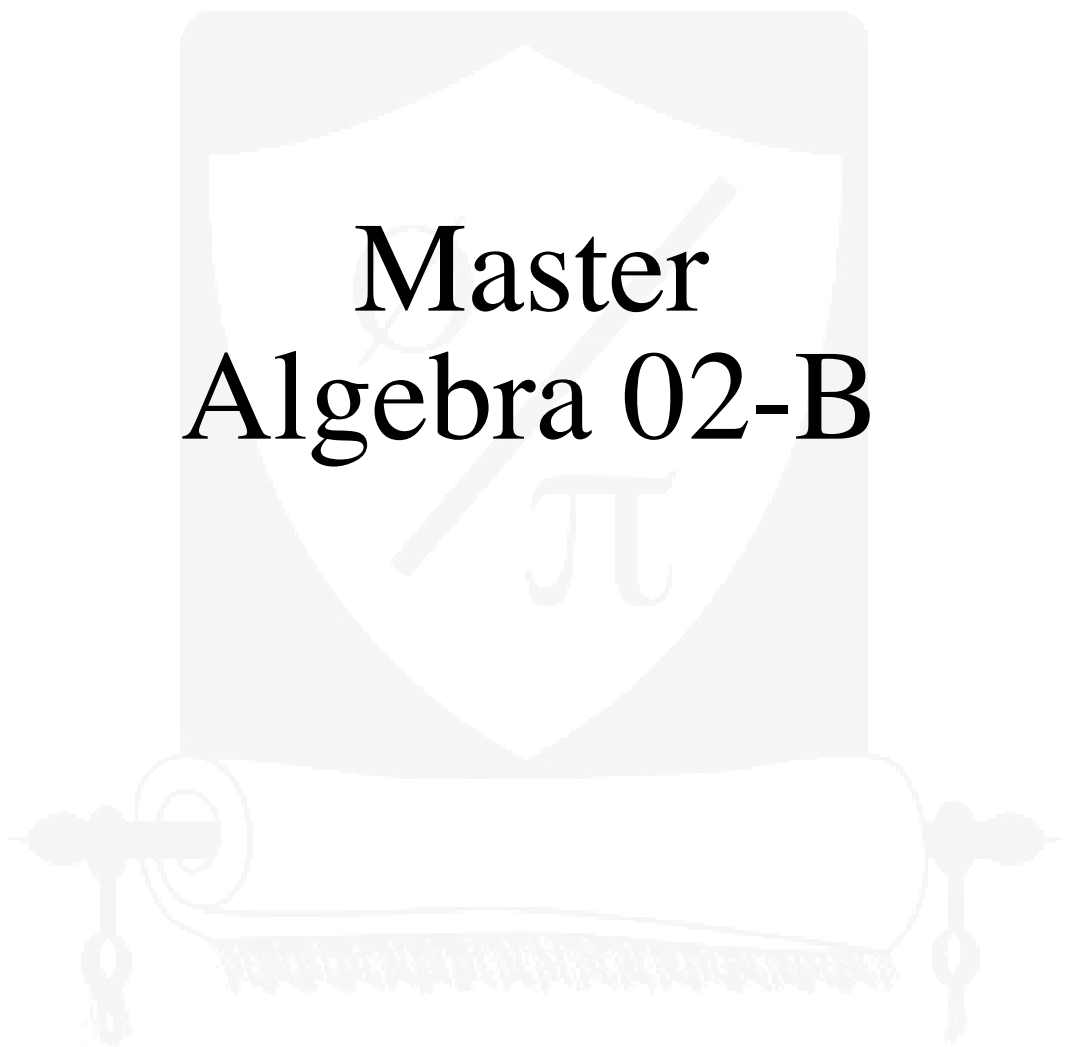
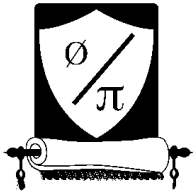


**M a s t e r C o a c h i n g**

MASTER COACHING

# Master Algebra 02-B





# Algebra 02-B

a  $n+n+n$

b  $a^5 + a^5$

c  $x^3 + x^3$

d  $7n - n$

e  $4k - 4$

f  $\tan x + \tan x$

g  $a^3 + a^3 + a^3$

h  $z+z+z+z$

i  $5a \times a \times 3$

j  $8 \times 3 \times 8 \times 8$

k  $4m \times 7m + 3m^2$

l  $6 \times 3x$

m  $3a \times 4b$

n  $5 \times 3m^2$

o  $3\sqrt{x} - 3$

p  $\frac{1}{\sqrt{n}} + \frac{1}{\sqrt{n}}$

q  $xy - x$

r  $x^3 + 5^7 a$

s  $\sqrt{n} \times \sqrt{n}$

t  $\tan x \times \tan x$

u  $3^9 \times 3^4$

v  $\log 6 + \log 6$

w  $9(x-4) - 8(x-4)$

x  $8 \times 5a + a$

y  $k^7 + k^7 + k^7$

z  $\sqrt{x} \times 4$

$\alpha$   $\frac{x-2}{a} + \frac{2}{a}$

$\beta$   $(a-7)^3 + (a-7)^3$

$\gamma$   $9m^3 - 4m \times 2m$

$\delta$   $17a^9 \div 17a^9$

$\epsilon$   $18x^3 \div x^2$

$\phi$   $5(\ln x - 1) - (\ln x - 1)$

$\theta$   $(x-3)^{18} \div (x-3)$

a  $x+x$

b  $6a+2a$

c  $\sqrt{x} + \sqrt{x}$

d  $6p^2 - p^2$

e  $9x^3 - x - x - x$

f  $5^x + 5^x + 5^x$

g  $x \times x \times x$

h  $7xa \times x$

i  $5x \times 4x$

j  $ab \times a \times ab$

k  $7 \times x$

l  $2x \times 8$

m  $x \times y \times q$

n  $6a^2 \times 3m$

o  $5x^2m - x^2m$

p  $\frac{2}{7} + \frac{4}{7}$

q  $p^3 \times p^4$

r  $a^7 \times a^9$

s  $7a^4 \times 5$

t  $\cos x \times \cos x$

u  $13^3 \times 13^5$

v  $(x-2)^5 + (x-2)^5$

w  $6m^2 - 6 - m^2$

x  $\sin 11^\circ + \sin 11^\circ$

y  $5 \times a^2 \times 2$

z  $3\sqrt{5} \times 4$

$\alpha$   $\frac{m}{5} + \frac{2m}{5}$

$\beta$   $7a \times 2 - a$

$\gamma$   $m^4 - m^3 \times m$

$\delta$   $18a^{12} \div 3a^3$

$\epsilon$   $7^{15} \div 7^5$

$\phi$   $5x^0 \times (3x)^0$

$\theta$   $3^{-2} + 2^0 - 9^{-1}$

a  $m^2 + m^2 + m^2$

b  $7m - 6m$

c  $\sqrt{5x} + \sqrt{5x}$

d  $8at - t$

e  $4x^2 + x^2$

f  $5a^3 - 5$

g  $7 \times 7 \times 7$

h  $8 \times a \times 3 \times a$

i  $5 \times 5 \times 7 \times 5$

j  $x + x \times x$

k  $2 \times 7a$

l  $x \times y$

m  $2 \times m^2$

n  $3\sqrt{x} - \sqrt{x}$

o  $7am - 2ma$

p  $\frac{3}{a} + \frac{2}{a}$

q  $7\sqrt{3} - \sqrt{3}$

r  $5a^7 \times 7a^5$

s  $3a^2b \times 2b$

t  $\frac{1}{n} \times \frac{1}{n}$

u  $2^9 \times 2^{14}$

z  $5\sqrt{7} - 3\sqrt{7}$

w  $11m - m - 11$

x  $\sqrt{61} + \sqrt{61}$

y  $3a \times 7 \times m$

z  $8a \times 3\sqrt{5}$

$\alpha$   $\frac{(x-4)^{10}}{x-4}$

$\beta$   $6a^2 - a \times a$

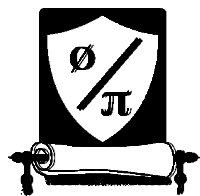
$\gamma$   $15a^{10} \div 15$

$\delta$   $12a^{12} \div 2a^6$

$\epsilon$   $10^9 \div 10^3$

$\phi$   $\tan x^3 + \tan x^3$

$\theta$   $7^{12x} \div 7^{4x}$



## Answers :

- |   |   |   |
|---|---|---|
| <b>a</b> $n + n + n = 3n$   | <b>a</b> $x + x = 2x$                                     | <b>a</b> $3m^2$                                       |
| <b>b</b> $a^5 + a^5 = 2a^5$   | <b>b</b> $6a + 2a = 8a$                                   | <b>b</b> $m$  |
| <b>c</b> $x^3 + x^3 = 2x^3$   | <b>c</b> $\sqrt{x} + \sqrt{x} = 2\sqrt{x}$                | <b>c</b> $2\sqrt{5x}$                                 |
| <b>d</b> $7n - n = 6n$  | <b>d</b> $6p^2 - p^2 = 5p^2$                              | <b>d</b> $8at - t$                                    |
| <b>e</b> $4k - 4 = 4k - 4$  | <b>e</b> $9x^3 - x - x - x = 9x^3 - 3x$                   | <b>e</b> $5x^2$                                       |
| <b>f</b> $\tan x + \tan x = 2\tan x$                                    | <b>f</b> $5^x + 5^x + 5^x = 3 \times 5^x$                 | <b>f</b> $5a^3 - 5$                                   |
| <b>g</b> $a^3 + a^3 + a^3 = 3a^3$                                       | <b>g</b> $x \times x \times x = x^3$                      | <b>g</b> $7^3$  |
| <b>h</b> $z + z + z + z = 4z$   | <b>h</b> $7xa \times x = 7x^2a$                           | <b>h</b> $24a^2$                                      |
| <b>i</b> $5a \times a \times 3 = 15a^2$                                 | <b>i</b> $5x \times 4x = 20x^2$                           | <b>i</b> $5^3 \times 7$                               |
| <b>j</b> $8 \times 3 \times 8 \times 8 = 8^3 \times 3$                  | <b>j</b> $ab \times a \times ab = a^3b^2$                 | <b>j</b> $x + x^2$                                    |
| <b>k</b> $4m \times 7m + 3m^2 = 31m^2$                                  | <b>k</b> $7 \times x = 7x$                                | <b>k</b> $14a$  |
| <b>l</b> $6 \times 3x = 18x$  | <b>l</b> $2x \times 8 = 16x$                              | <b>l</b> $xy$   |
| <b>m</b> $3a \times 4b = 12ab$  | <b>m</b> $x \times y \times q = xyq$                      | <b>m</b> $2m^2$                                       |
| <b>n</b> $5 \times 3m^2 = 15m^2$  | <b>n</b> $6a^2 \times 3m = 18a^2m$                        | <b>n</b> $2\sqrt{x}$                                  |
| <b>o</b> $3\sqrt{x} - 3 = 3\sqrt{x} - 3$                                | <b>o</b> $5x^2m - x^2m = 4x^2m$                           | <b>o</b> $5ma$  |
| <b>p</b> $\frac{1}{\sqrt{n}} + \frac{1}{\sqrt{n}} = \frac{2}{\sqrt{n}}$ | <b>p</b> $\frac{2}{7} + \frac{4}{7} = \frac{6}{7}$        | <b>p</b> $\frac{5}{a}$                                |
| <b>q</b> $xy - x = xy - x$  | <b>q</b> $p^3 \times p^4 = p^7$                           | <b>q</b> $6\sqrt{3}$                                  |
| <b>r</b> $x^3 + 5^7a = x^3 + 5^7a$                                      | <b>r</b> $a^7 \times a^9 = a^{16}$                        | <b>r</b> $35a^{12}$                                   |
| <b>s</b> $\sqrt{n} \times \sqrt{n} = n$                                 | <b>s</b> $7a^4 \times 5 = 35a^4$                          | <b>s</b> $6a^2b^2$                                    |
| <b>t</b> $\tan x \times \tan x = (\tan x)^2$                            | <b>t</b> $\cos x \times \cos x = (\cos x)^2$              | <b>t</b> $\frac{1}{n^2} = \left(\frac{1}{n}\right)^2$ |
| <b>u</b> $3^9 \times 3^4 = 3^{13}$                                      | <b>u</b> $13^3 \times 13^5 = 13^8$                        | <b>u</b> $2^{23}$                                     |
| <b>v</b> $\log 6 + \log 6 = 2\log 6$                                    | <b>v</b> $(x-2)^5 + (x-2)^5 = 2(x-2)^5$                   | <b>v</b> $2\sqrt{7}$                                  |
| <b>w</b> $9(x-4) - 8(x-4) = x-4$  | <b>w</b> $6m^2 - 6 - m^2 = 5m^2 - 6$                      | <b>w</b> $10m - 11$                                   |
| <b>x</b> $8 \times 5a + a = 41a$  | <b>x</b> $\sin 11^\circ + \sin 11^\circ = 2\sin 11^\circ$ | <b>x</b> $2\sqrt{61}$                                 |
| <b>y</b> $k^7 + k^7 + k^7 = 3k^7$                                       | <b>y</b> $5 \times a^2 \times 2 = 10a^2$                  | <b>y</b> $21am$                                       |
| <b>z</b> $\sqrt{x} \times 4 = 4\sqrt{x}$                                | <b>z</b> $3\sqrt{5} \times 4 = 12\sqrt{5}$                | <b>z</b> $24a\sqrt{5}$                                |
| <b>\alpha</b> $\frac{x-2}{a} + \frac{2}{a} = \frac{x}{a}$               | <b>\alpha</b> $\frac{m}{5} + \frac{2m}{5} = \frac{3m}{5}$ | <b>\alpha</b> $(x-4)^9$                               |
| <b>\beta</b> $(a-7)^3 + (a-7)^3 = 2(a-7)^3$                             | <b>\beta</b> $7a \times 2 - a = 13a$                      | <b>\beta</b> $5a^2$                                   |
| <b>\gamma</b> $9m^3 - 4m \times 2m = 9m^3 - 8m^2$                       | <b>\gamma</b> $m^4 - m^3 \times m = 0$                    | <b>\gamma</b> $a^{10}$                                |
| <b>\delta</b> $17a^9 \div 17a^9 = 1$                                    | <b>\delta</b> $18a^{12} \div 3a^3 = 6a^9$                 | <b>\delta</b> $6a^6$                                  |
| <b>\epsilon</b> $18x^3 \div x^2 = 18x$                                  | <b>\epsilon</b> $7^{15} \div 7^5 = 7^{10}$                | <b>\epsilon</b> $10^6$                                |
| <b>\phi</b> $5(\ln x - 1) - (\ln x - 1) = 4(\ln x - 1)$                 | <b>\phi</b> $5x^0 \times (3x)^0 = 5$                      | <b>\phi</b> $2\tan x^3$                               |
| <b>\theta</b> $(x-3)^{18} \div (x-3) = (x-3)^{17}$                      | <b>\theta</b> $3^{-2} + 2^0 - 9^{-1} = 1$                 | <b>\theta</b> $7^{8x}$                                |