Elementary Mathematics Task

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Preface

Contents

The object of this small book is to give a practical course of the elementary mathematics calculations.

The book will be good for everyone who needs take such a course.

The best way to use this book is to print it and use a manual engineering calculator that doesn't support formula input.

The answers to the tables #1, 3, 4 are computed with Wolfram Mathematica, the answers to the table #2 with Mathcad.

Arithmetic with a calculator

Contents

The problems of this section should be done with a calculator. You should not write intermediate results on the paper but should use memory cells in your calculator instead. The calculator must not support formula input.

Table 1

	1	2	3	4
1	$-5.6-7.8\cdot 9.2$	$\frac{-5.2+3.8^{3}}{(3.2-7.5\cdot 3)^{2}}$	$\log_{2.5}(\pi)$	$-3^{8.56-\pi}$
2	$\sqrt{7.3\cdot 10^{34}}$	$(5^{3})^{2}-5^{3^{2}}$	$\frac{(3.6-2.2)7.3}{6.8^{2}}$	$-15.3\cdot 10^{-2}+0.5\cdot 10^{2}$
3	$(-7.8)^{3}\cdot(-3.5)^{8}$	$-35.6\cdot 10^{-6}-16.8\cdot 10^{-6}$	$e^{\pi}-\pi^{e}$	$\frac{1}{16.5}\cdot\frac{2\cdot 83}{5^{2}}$
4	$\frac{2^{-12}\cdot 2^{5}\cdot e^{2}}{2^{4}\cdot 2^{-7}\cdot 9^{2}}$	$\frac{+3.5^{2}\left(6.8-3.7^{2}\right)}{(6.8-3)^{2}\,7^{3}}$	$-6.2\cdot 10^{-2}+7.3\cdot 10^{-5}$	$(-1)^{10001}$
5	$6.7\cdot 10^{4}-3.2\cdot 10^{4}$	$\mathrm{Cos}^{2}(\pi/4)+\mathrm{Sin}^{2}(\pi/4)$	$\frac{1}{4.85}-\frac{9.8\cdot 16\cdot 1}{35^{2}}$	1000000^{0}
6	$54^{1/3}-54^{1/2}$	$\frac{2.5^{-3}\cdot 5^{4}}{5^{3}+16^{-2}}+\frac{1}{10^{-2}}$	$\frac{1}{10^{6}}+\frac{5^{-4}}{2}-(10^{-3})^{2}$	$\sqrt[4]{35^{3}}-\sqrt[3]{15^{2}}$
7	$(-10^{-4})^{3}+\frac{10^{-5}}{1}+\frac{(2.03\cdot 10^{-6})^{2}}{4}$	$\sqrt{\sqrt{37}}$	$\frac{\sqrt{35}}{\sqrt{7}}-\frac{-16}{-35}$	$\frac{25}{\sqrt{6}}-\frac{37-144}{18\cdot 3.2}$
8	$56^{1/4}$	$\frac{10^{-5}}{\sqrt{3}}$	$\sqrt{\frac{1}{25}-\frac{2}{181}}$	$\sqrt{\frac{6.6\cdot\sqrt{7.8^{-2}}}{3.4}}$
9	$(6.8+\mathrm{Sin}(35°))\div\frac{2.05^{0}}{1+\frac{1}{1+\frac{1}{1+\frac{1}{1.1}}}}$	$\frac{\sqrt{18}\cdot\sqrt{93}}{\sqrt{7}\cdot\sqrt{6}}/10^{-1}$	$\sqrt{6.8\cdot 10^{-35}}$	$(101-100)^{100}$
10	$\frac{\sqrt{8}-\sqrt{7}}{\sqrt{9}+\sqrt{6}}$	$\frac{\frac{36}{7}-\frac{8}{9}+14}{1-63/84}$	$6\cdot\frac{18-4}{\sqrt{3}}$	$\frac{10^{-5}\cdot 10^{2}}{10^{16}\cdot 10^{-35}}$
11	$-6\cdot\frac{18.2^{2}}{3-5}$	$\frac{2.7\cdot 10^{-6}\cdot 5.7\cdot 10^{3}}{6.2\cdot 10^{5}\cdot 7.8\cdot 10^{-9}}$	$\sqrt[3]{\left(\frac{(12+5-5)2}{2}\right)^{3}}$	$\frac{(0.6)^{0}-(0.1)^{-1}}{(3/2^{3})^{-1}\cdot 1.5^{3}+\left(\frac{-1}{3}\right)^{-1}}$
12	$\frac{\mathrm{tg}(30°)\cdot\lg(2)}{(-3.5)^{3}\cdot 68}$	$\sqrt{\frac{6.5^{3}\cdot 7^{2}}{(-3)^{2}\ (5.8-3)^{0}}}$	$\frac{(7-6.35)/6.5+9.9}{\left(1.2/36-1-\frac{5}{16}\right)\div\frac{169}{24}}$	$\frac{\mathrm{tg}(30)\cdot\lg^{2}(2)}{\lg(\mathrm{tg}(30°)+7.5)}$
13	$3\frac{2}{7}-4\frac{1}{7}$	$3\cdot\frac{2}{7}-4\cdot\frac{1}{7}$	$\mathrm{tg}(\mathrm{arctg}(\exp(\ln((\sqrt{12})^{2}))))$	$\frac{-(5-6)(5-1)}{-(2-3)(-3)^{5}}$
14	$\frac{5.1^{3}+5.1^{5}}{5.1^{8}}$	$(1+\frac{1}{1000})^{1000}$	$\lg\left(\lg\left(\lg\left(10^{100}\right)\right)\right)$	$e^{e^{e^{1.5}}}$
15	$(10^{-10})^{10^{-10}}$	$\sum_{n=0}^{5}\frac{1}{n!}$	$\frac{\lvert\pi-3+3.15\rvert}{(-2)^{3}\left(\lvert-8.1\rvert+(-3)^{2}-0.05\right)}$	$\frac{\sin\left(10^{-5}\right)}{10^{-5}}$
16	$0-\frac{25}{-16}-\frac{-37}{-6}-0\cdot\frac{-3}{5}$	$(-1)^{20002}$	$\sqrt[3]{38}-\sqrt{38}$	$-2\cdot(3\cdot 2-6)-(-17+3)$
17	$\frac{10}{5^{-2}}$	$\sqrt{\frac{4^{-3}\cdot 2^{2}}{\sqrt{5}}+\frac{10^{-6}}{10^{-5}}}$	$\frac{10^{-5}}{2}$	$(16-3)^{2}\cdot 5-(3-7)^{3}\cdot 7$
18	$\frac{1000}{6.2+3.73}$	$\frac{1}{\sqrt{5-\sqrt{5-\sqrt{5}}}}$	$\frac{(-1)^{101}-(-1)^{100}}{(-1)^{69}+(-2)^{1}}$	$\frac{2^{2}\cdot 2^{-7}\cdot 2^{16}}{2^{8}\cdot 2^{-14}}$

Answers to Table 1 (Rounding is considered)

	1	2	3	4
1	-7.74×10^{1}	1.33×10^{-1}	1.25	-3.85×10^{2}
2	2.70×10^{17}	-1.94×10^{6}	2.21×10^{-1}	4.98×10^{1}
3	-1.07×10^{7}	-5.24×10^{-5}	6.82×10^{-1}	4.02×10^{-1}
4	5.70×10^{-3}	-1.70×10^{-2}	-6.19×10^{-2}	-1.00
5	3.50×10^{4}	1.00	7.82×10^{-2}	1.00
6	-3.57	1.00×10^{2}	8.00×10^{-4}	8.31
7	1.00×10^{-5}	2.47	1.78	1.21×10^{1}
8	2.74	5.77×10^{-6}	1.70×10^{-1}	4.99×10^{-1}
9	1.22×10^{1}	6.31×10^{1}	8.25×10^{-18}	1.00
10	3.35×10^{-2}	7.30×10^{1}	4.85×10^{1}	1.00×10^{16}
11	9.94×10^{2}	3.18	1.20×10^{1}	-1.50
12	-5.96×10^{-5}	3.87×10^{1}	-5.50×10^{1}	-6.40×10^{-1}
13	-8.57×10^{-1}	2.86×10^{-1}	1.20×10^{1}	-1.65×10^{-2}
14	7.83×10^{-3}	2.72	3.01×10^{-1}	2.42×10^{38}
15	1.00	2.72	-2.41×10^{-2}	1.00
16	-4.60	1.00	-2.80	1.40×10^{1}
17	2.50×10^{2}	2.67×10^{-1}	5.00×10^{-6}	1.29×10^{3}
18	1.01×10^{2}	5.47×10^{-1}	6.67×10^{-1}	1.31×10^{5}

Examples

1) Table1(1,1)

7.8 ; $^{+}/_{-}$; × ; 9.2 ; - ; 5.6 ; =

2) Table1(12,4)

DEG ; 30 ; tan ; + ; 7.5 ; = ; Log ; X→M ; RAD ; 30 ; tan ; ÷ ; MR ; = ; X→M ; 2 ; Log ; x^2 ; × ; MR ; =

3) Table1(18,2)

5 ; √ ; $^{+}/_{-}$; + ; 5 ; = ; √ ; $^{+}/_{-}$; + ; 5 ; = ; √ ; SHIFT ; 1/x

The above examples' steps of calculations are given in terms of Scientific Calculator CITIZEN SRP-145T II.

Order of operations	
Operation	Order
( )	1
function	2
× ; ÷	3
+ ; -	4

Inverse functions	
Direct operation	Inverse operation
$+x$	$-x$
$\cdot x$	$\div x$
x^2	$\sqrt{x}$
x^3	$\sqrt[3]{x}$
$x^{\frac{m}{n}}$	$x^{\frac{n}{m}}$
$\sin x$	$\arcsin x$
$\cos x$	$\arccos x$
$\mathrm{tg}\, x$	$\mathrm{arctg}\, x$
$\mathrm{ctg}\, x$	$\mathrm{arcctg}\, x$
e^x	$\ln x$
10^x	$\lg x$
a^x	$\log_a x$
Inverse operation	Direct operation

Notes.

1)

$\mathrm{tg}^2 x = (\mathrm{tg}\, x)^2$; $\mathrm{tg}\, x = \tan x = \mathrm{Tan}(x)$; $\ln x = \log_e x$;

$\lg x = \log_{10} x$; $\sqrt[m]{x^n} = x^{n/m}$; $\exp(x) = e^x$; $\log_a x = \frac{\ln x}{\ln a}$;

2) Sometimes an antitrigonometric function is denoted by the raising to the -1 power.

So, $\arcsin(x) = \sin^{-1}(x) \neq \frac{1}{\sin(x)}$

But in this book $\sin^{-1}(x) = (\sin(x))^{-1} = \frac{1}{\sin(x)}$ as usual.

3) If multiplying and dividing come consecutively perform them from left to right by turn. In another way perform dividing first then multiplying.

So, 18/3·2 = 12 ; 18·6/3 = 36 ; 18/3·2 ≠ 3.

4) You should consider all numbers to be signed.

So, 5 = +5 ;

Arithmetic without a calculator

Contents

In this section you may write by hand or type your solutions, anyway the following tasks should be done without a calculator and any of math programs.

Table 2

#	Task	Answer
1	$\dfrac{(7 - 6.35) \div 6.5 + 9.9}{\left(1.2 \div 36 + 1.2 \div 0.25 - 1\frac{5}{16}\right) \div \frac{169}{24}}$	20
2	$\left(\left(\frac{7}{9} - \frac{47}{72}\right) \div 1.25 + \frac{7}{40}\right) \div (0.358 - 0.108) \times 1.6 - \frac{19}{25}$	1
3	$\left(\dfrac{3\frac{1}{3} + 2.5}{2.5 - 1\frac{1}{3}} \times \dfrac{4.6 - 2\frac{1}{3}}{4.6 + 2\frac{1}{3}} \times 5.2\right) \div \left(\dfrac{0.05}{\frac{1}{7} - 0.125} + 5.7\right)$	1
4	$\dfrac{\left(1\frac{1}{5} \div \left(\frac{17}{40} + 0.6 - 0.005\right)\right) \times 1.7}{\frac{5}{6} + 1\frac{1}{3} - 1\frac{23}{30}} + \dfrac{4.75 + 7\frac{1}{2}}{33 \div 4\frac{5}{7}} \div 0.25$	12
5	$\dfrac{\left(4.5 \times 1\frac{2}{3} - 6.75\right) \times \frac{2}{3}}{\left(3\frac{1}{3} \times 0.3 + 5\frac{1}{3} \times \frac{1}{8}\right) \div 2\frac{2}{3}} + \dfrac{1\frac{4}{11} \times 0.22 \div 0.3 - 0.96}{\left(0.2 - \frac{3}{40}\right) \times 1.6}$	1
6	$\dfrac{\left(1.88 + 2\frac{3}{25}\right) \times \frac{3}{16}}{0.625 - \frac{13}{18} \div \frac{26}{9}} + \dfrac{\left(\frac{0.216}{0.15} + 0.56\right) \div 0.5}{\left(7.7 \div 24\frac{3}{4} + \frac{2}{15}\right) \times 4.5}$	4
7	$\left(16\frac{1}{2} - 13\frac{7}{9}\right) \times \frac{18}{33} + 2.2\left(\frac{8}{33} - \frac{1}{11}\right) + \frac{2}{11}$	2
8	$\dfrac{0.128 \div 3.2 + 0.86}{\frac{5}{6} \times 1.2 + 0.8} \times \dfrac{\left(1\frac{32}{63} - \frac{13}{21}\right) \times 3.6}{0.505 \times \frac{2}{5} - 0.002}$	8
9	$\left(\left(1\frac{1}{7} - \frac{23}{49}\right) \div \frac{22}{147} - \left(0.6 \div 3\frac{3}{4}\right)2\frac{1}{2} + 3.75 \div 1\frac{1}{2}\right) \div 2.2$	3
10	$\left(2 \div 3\frac{1}{5} + \left(3\frac{1}{4} \div 13\right) \div \frac{2}{3} + \left(2\frac{5}{18} - \frac{17}{36}\right) \times \frac{18}{65}\right) \times \frac{1}{3}$	0.5

#	Task	Answer
11	$\frac{0.5+\frac{1}{4}+\frac{1}{6}+0.125}{\frac{1}{3}+0.4+\frac{14}{15}}+\frac{(3.75-0.625)\times\frac{48}{125}}{12.8\times0.25}$	1
12	$((21.85\div43.7+8.5\div3.4)\div4.5)\div1\frac{2}{5}+1\frac{11}{21}$	2
13	$\frac{\left(3^{-1}-\sqrt{1\frac{7}{9}}\right)^{-2}\div0.25}{\frac{37}{300}\div0.0925}+12.5\times0.64$	11
14	$\frac{((7-6.35)\div6.5+9.9)\times\frac{1}{12.8}}{\left(1.2\div36+1\frac{1}{5}\div0.25-1\frac{5}{6}\right)\times1\frac{1}{4}}\div0.125$	5 / 3
15	$\frac{3.75\div1\frac{1}{2}+\left(1.5\div3\frac{3}{4}\right)\times2\frac{1}{2}+\left(1\frac{1}{7}-\frac{23}{49}\right)\div\frac{22}{147}}{2\div3\frac{1}{5}+\left(3\frac{1}{4}\div13\right)\div\frac{2}{3}-\left(2\frac{5}{18}-\frac{17}{36}\right)\times\frac{18}{65}}$	16
16	$\frac{\left(\left(4.625-\frac{13}{18}\times\frac{9}{26}\right)\div\frac{9}{4}+2.5\div1.25\div6.75\right)\div1\frac{53}{68}}{\left(\frac{1}{2}-0.375\right)\div0.125+\left(\frac{5}{6}-\frac{7}{12}\right)\div(0.358-1.4796\div13.7)}$	17 / 27
17	$\frac{\left(\left(3\frac{7}{12}-2\frac{11}{18}+2\frac{1}{24}\right)\times1\frac{5}{31}-\frac{3}{52}\left(3\frac{1}{2}+\frac{5}{6}\right)\right)\times1\frac{7}{13}}{\frac{19}{84}\div\left(5\frac{13}{42}-2\frac{13}{28}+\frac{5}{24}\right)+1\frac{2}{27}-\frac{1}{3}\times\frac{4}{9}}$	5
18	$\left(\frac{(3.2-1.7)\div0.003}{\left(\frac{29}{35}-\frac{3}{7}\right)\times4\div0.2}-\frac{\left(1\frac{13}{20}-1.5\right)\times1.5}{\left(2.44+1\frac{14}{25}\right)\times\frac{1}{8}}\right)\div62\frac{1}{20}+1.364\div0.124$	12
19	$\frac{2^{-2}+5^{0}}{(0.5)^{-2}-5(-2)^{-2}+\left(\frac{2}{3}\right)^{-2}}+4.75$	5
20	$\frac{(0.6)^{0}-(0.1)^{-1}}{(3\div2^{3})^{-1}\times(1.5)^{3}+\left(-\frac{1}{3}\right)^{-1}}$	-1.5

Notes.

1) All numbers in this section are considered to be exact. No approximate calculation is allowed.

2) The task of this section (table #2) is compiled from the problem book under the editorship of M.I. Skanavi.

Example

$$\left(\frac{3\frac{1}{3}+2.5}{2.5-1\frac{1}{3}}\cdot\frac{4.6-2\frac{1}{3}}{4.6+2\frac{1}{3}}\cdot 5.2\right):\left(\frac{0.05}{\frac{1}{7}-0.125}+5.7\right)=\left(\frac{\frac{10}{3}+\frac{25}{10}}{\frac{25}{10}-\frac{4}{3}}\cdot\frac{\frac{46}{10}-\frac{7}{3}}{\frac{46}{10}+\frac{7}{3}}\cdot\frac{52}{10}\right):\left(\frac{\frac{5}{100}}{\frac{1}{7}-\frac{125}{1000}}+\frac{57}{10}\right)=$$

$$=\left(\frac{\frac{10}{3}+\frac{5}{2}}{\frac{5}{2}-\frac{4}{3}}\cdot\frac{\frac{23}{5}-\frac{7}{3}}{\frac{23}{5}+\frac{7}{3}}\cdot\frac{26}{5}\right):\left(\frac{\frac{1}{20}}{\frac{1}{7}-\frac{5}{40}}+\frac{57}{10}\right)=\left(\frac{\frac{20+15}{6}}{\frac{15-8}{6}}\cdot\frac{\frac{69-35}{15}}{\frac{69+35}{15}}\cdot\frac{26}{5}\right):\left(\frac{\frac{1}{20}}{\frac{1}{7}-\frac{1}{8}}+\frac{57}{10}\right)=$$

$$=\left(\frac{\frac{35}{6}\cdot 6}{\frac{7}{6}\cdot 6}\cdot\frac{\frac{34}{15}\cdot 15}{\frac{104}{15}\cdot 15}\cdot\frac{26}{5}\right):\left(\frac{\frac{1}{20}}{\frac{1}{56}}+\frac{57}{10}\right)=\left(\frac{35}{7}\cdot\frac{34}{104}\cdot\frac{26}{5}\right):\left(\frac{1}{20}:\frac{1}{56}+\frac{57}{10}\right)=$$

$$=\left(\frac{34\cdot 26}{104}\right):\left(\frac{56}{20}+\frac{57}{10}\right)=\left(\frac{34}{4}\right):\left(\frac{56+114}{20}\right)=\frac{17}{2}\cdot\frac{20}{170}=\frac{1}{1}\cdot\frac{10}{10}=1$$

The how of it.

1) First you should check the arithmetic expression(the task) you have written on your notebook. That is the way to do it.

Your left forefinger points at the current symbol of the source. At the same time your right forefinger points at the corresponding symbol of the copy you have written. After checking that symbol your left forefinger shifts to the right and you are checking the next symbol. And so on to the end of the source.

Note, you should check with your fingers not only your eyes. Your fingers lie on the paper not hover over it. You check in the direction of the copy from the source not the other way. You may hide with a ruler the unnecessary piece of the page on which the source is written.

After checking the copy twice you may go on.

2) You should not write the solution in the shape of a numbered list solving the problem step by step. The given problems are too large to go this way. Look at the example above. You should perform several arithmetic operations and transformations in one pass.

3) Don’t perform more than two operations mentally.

4) Go on writing the solution in detail. So that, you will find a mistake faster if you make one.

5) Do not be in haste. To calculate is not to move a computer mouse as you know.

6) You may debug your solution. Just enter an examined expression into the calculator that supports formula input. If the result is the same as the answer search a mistake elsewhere. (The examined expression is a whole expression between two equal signs.)

Algebra

Contents

In this section x is desired.

$$a = -1.5;\ \ b = 0.2;\ \ c = 3.4$$

Table 3

	1	2	3	4	5
1	$ax+b=c$	$-ab+x=c$	$axb=-c$	$-ax^2-b=c$	$a\sqrt{x}+b=-c$
2	$-a\sqrt{x}-b\sqrt{x}=c$	$\sqrt[3]{x}-a=c$	$\sqrt{b}\sqrt{x}-b=-a$	$\sqrt{x+b}=c$	$ax^3=(b+c)^2$
3	$-a\sin x=b$	$\sin a=-\sqrt{x+c}$	$tg(bx)=a$	$tg^2x^3+a=b$	$\sqrt[3]{x^4}=-a$
4	$x^{2/5}=b$	$x^{5/2}=\sqrt{b-a}$	$2^x=b$	$(3^x)^2=(-a)^2$	$-\log_3^{-1}x=b$
5	$(\lg\sqrt{x})^2=b$	$\sin^2x^3=b$	$(-a+b)^x=c$	$\frac{ax}{b}=\frac{3}{c}$	$-\log_2 x=a$

Answers to Table 3 (Rounding is considered)

	1	2	3	4	5
1	-2.1(3)	3.1	11.(3)	±1.55	5.76
2	6.84	6.859	14.45	11.36	-2.05
3	0.1337	-2.41	-4.91	0.971	±1.36
4	1.79E-02	1.11	-2.32	0.369	4.12E-03
5	7.84;0.128	0.774	2.31	-0.118	2.83

Example

$$\mathrm{tg}^2\, x^3 + a = b$$

$$\mathrm{tg}^2\, x^3 + a = b$$

$$\mathrm{tg}^2\, x^3 + a - a = b - a$$

$$\mathrm{tg}^2\, x^3 = b - a$$

$$\sqrt{\mathrm{tg}^2\, x^3} = \sqrt{b - a}$$

$$\mathrm{tg}\, x^3 = \sqrt{b - a}$$

$$\mathrm{arctg}\, \mathrm{tg}\, x^3 = \mathrm{arctg}\, \sqrt{b - a}$$

$$x^3 = \mathrm{arctg}\, \sqrt{b - a}$$

$$\sqrt[3]{x^3} = \sqrt[3]{\mathrm{arctg}\, \sqrt{b - a}}$$

$$x = \sqrt[3]{\mathrm{arctg}\, \sqrt{b - a}}$$

$$x = \sqrt[3]{\mathrm{arctg}\, \sqrt{b - a}} = \sqrt[3]{\mathrm{arctg}\, \sqrt{0.2 - (-1.5)}} =$$

$$= \sqrt[3]{\mathrm{arctg}\, \sqrt{1.7}} \approx 9.71362998\text{E-}01 \approx 0.971$$

$$x \approx 0.971$$

Explanations

In any mathematical expression you should always see where the last mathematical operation is. In the example above you can see the last operation marked with red. Then you find out the inverse operation to the last one and apply it to both sides of the equation. When applied consecutively they are canceled according to the definition of the inverse operation. To find the inverse operation see the "Inverse functions" table.

Also, you should always remember that in any mathematical equation the left side IS the right side that is the left side as well as the right side are the same mathematical object but called by different names. In this example the object is a number. The number is 0.2 . The short name of the number is b. To find b you must perform 4 operations at the left side of the equation but you can still consider the left side of the equation as the single number b [1]) but called by the different long name (tg(x^3))^2 + a.

[1]) We usually call an object by its name.

Table 4

	1	2	3	4	5
1	$-\frac{ac}{x}=\frac{ax^2}{b}$	$\frac{a}{x}-c=\frac{1}{b}$	$8\frac{x}{a}-2=\frac{-x}{b}$	$\frac{x-1}{a}+\frac{2-3x}{b}=4$	$\frac{x^2}{-a}+\frac{x^2}{b}=\frac{1}{c}$
2	$-\sqrt{x-1}+2=b$	$\frac{x-b}{x-a}-\frac{1}{b}=3$	$\sqrt{\frac{x-b}{x-a}}=\frac{1}{2}$	$\sqrt{\frac{3x-1}{2x+2}}=b$	$\sqrt[3]{\frac{2x}{x+1}}=b$
3	$\frac{(b-a)^{0.1}}{x}=\frac{2x}{c}$	$\frac{ax^{-2}}{-bx^{-4}}=\frac{cx^3}{bx^5}$	$\frac{-a^2x}{(-a)^2}=\frac{x^2}{c}$	$-\frac{-a}{-x}=\frac{1}{-b}$	$\begin{cases}ax+by=c\\x-y=1\end{cases}$
4	$\begin{cases}ax+by=c\\\sqrt{c}\cdot x-ay=b\end{cases}$	$\begin{cases}-axy=b\\2x-3y=+a\end{cases}$	$\begin{cases}\frac{bx^2}{2}=\sqrt{c+y}\\5y^2=4\end{cases}$	$\begin{cases}\frac{\sqrt{ax}}{b}=\frac{cy}{a}\\-xy^2=\left(\frac{a}{c}\right)^2\end{cases}$	$\begin{cases}\sqrt{ax-y}=e^{-c}\cos b\\\sqrt{x+y}=e^{-c}\sin b\end{cases}$
5	$\begin{cases}x\sin b=y^2x^2\\(xy)^2=b\end{cases}$	$\begin{cases}x^3=aby\\x^2=y\sin b\end{cases}$	$\begin{cases}x^3=y\sin a\\\frac{1}{x^2}=\frac{1}{(\cos a)y}\end{cases}$	$\begin{cases}2\sqrt{x}=y\\ay^2=-3\end{cases}$	$c\frac{ax}{y}=\frac{6}{y}-\frac{a}{y}$
6	$\begin{cases}\frac{ax}{y}=\frac{-by}{c}\\\frac{y}{x^2}=\frac{x}{y}\end{cases}$	$\begin{cases}ax+by+cz=1\\2x-3y+4z=2\\-x-y+z=-1\end{cases}$	$\begin{cases}\frac{2x}{y}=\frac{3y}{a}\\yz=1/z\\zx=5\end{cases}$	$\begin{cases}\frac{x^2y}{2}=c(b-a)\\yz=4\\z=2c^{-1}\end{cases}$	$\begin{cases}y^3=abx\\y^2=x\sin b\end{cases}$

Answers to Table 4 (Rounding is considered)

	1	2	3	4	5
1	-0.879	-0.179	-6	0.426	±0.228
2	4.24	-1.74	0.7(6)	0.37	4.02E-03
3	±1.34	±1.23	0; -3.4	-0.3	-2.77
4	-1.93	0.209; -0.959	±4.55; ±3.98	-0.163	-2.23E-03
5	1.007	0; -1.51	-14.1	0.5	-1.47
6	5.05	0.873	-8.55	±1.3	0;11.5

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