# **Elementary Math**

Основными операциями в данном разделе являются простые математические преобразования над числами и основные математические действия.

Arithmetic		Fractions	
Perform multiple arithmetic operations.		Perform arithmetic on fractions.	
Do basic arithmetic:		Add fractions:	
125 + 375	=	1/6 + 5/12 + 3/4	=
1.05 * 12,000	=	Multiply fractions:	
		3/8 * 2/7	=
7^3	=		
Find square roots:		Do exact arithmetic with fractions:	
sqrt 1801	=	1/4 * (4 - 1/2)	=
Place Value  Explore place value charts for decimal numb	oers.	Percentages Compute percentages or solve percentage increase/decrease problems.	
Show place values for a number:		Convert a fraction to a percentage:	
place values of 6135	=	convert 1/6 to percent	=
Find the value of a particular digit of a number:		Calculate a percentage of a quantity:	
value of the digit 3 in 23904	=	30% of 8 miles	=
More examples		Compute a discounted price:	
		15% off of \$29.95	=
		More examples	

Также существует возможность решать простые математические задачи заданные текстом:

#### **Mathematical Word Problems**

Compute the answer and examine related facts for a math word problem.

Solve a word problem:

Rachel has 17 apples. She gives 9 to Sarah. How many apples does Rachel have now?

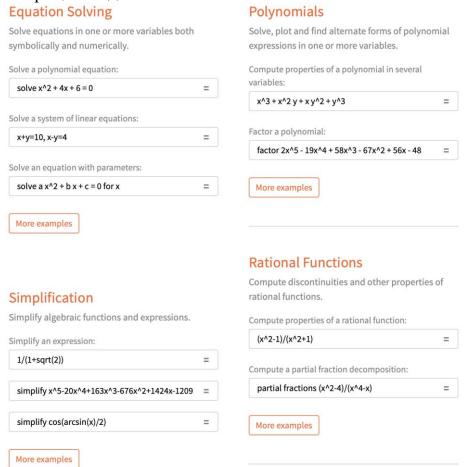
Rhonda has 12 marbles more than Douglas. Douglas has 6 marbles more than Bertha. Rhonda has twice as many marbles as Bertha has. How many marbles does Douglas have?

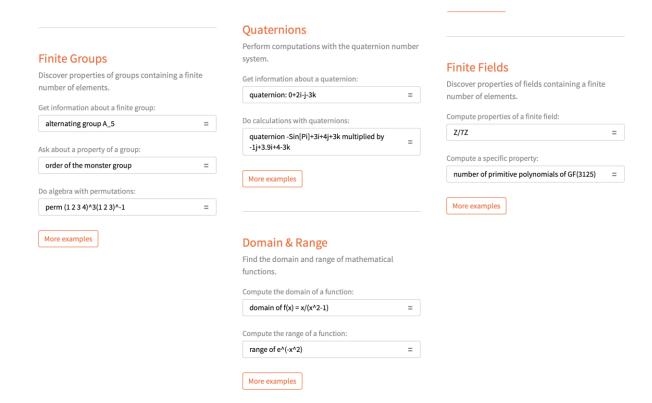
More examples

### Algebra

Данный раздел позволяет решать многочисленные алгебраические задания, например вычисление рациональных функций, преобразование выражений, матрицы и т.д.

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## **Trigonometry**

Данный раздел позволяет решать любые задачи так или иначе связанные с тригонометрией. Вычисление выражений, тригонометрические функции, теоремы тригонометрии.

## **Trigonometric Calculations**

Evaluate trigonometric functions or larger expressions involving trigonometric functions with different input values.

Compute values of trigonometric functions:



### **Trigonometric Identities**

Learn about and apply well-known trigonometric identities.



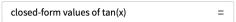
# **Trigonometric Functions**

Learn about and perform computations using trigonometric functions and their inverses, over the real or complex numbers.

Compute properties of a trigonometric function:

cos x	=
sec(5x)	=
Compute properties of an inverse trigonometric function:	
arccot x	=
Plot a trigonometric function:	
plot sin(x)	=
Analyze a trigonometric function of a complex var	iable:
sin(z)	=
Analyze a trigonometric polynomial:	
cos(x) + 1/2 cos(2x) + 1/4 cos(4x)	=

Generate a table of special values of a function:



Compute the root mean square of a periodic function:

root mean square 3sin(t)-2cos(2t) =

### **Trigonometric Identities**

Learn about and apply well-known trigonometric identities.

Find multiple-angle formulas:

expand sin 4x	=
Find addition formulas:	
expand sin(x+y+z)	=
Find other trig identities:	
factor sin x + sin y	=

# **Spherical Trigonometry**

Study the relationships between side lengths and angles of triangles when these triangles are drawn atop a spherical surface.

Apply a theorem of spherical trigonometry:

law of haversines	=
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Plot a trigonometric function:

plot sin(x) =

Analyze a trigonometric function of a complex variable:

sin(z) =

Analyze a trigonometric polynomial:

cos(x) + 1/2 cos(2x) + 1/4 cos(4x) =

Generate a table of special values of a function:

closed-form values of tan(x) =

Compute the root mean square of a periodic function:

root mean square 3sin(t)-2cos(2t) =

root mean square squarewave(t/3) + sin(pi t)