

Долгожданный дан звонок,  
Начинается урок!

-Ну-ка проверь, дружок,  
Ты готов начать урок?

Всё ли на месте,  
Всё ли в порядке.

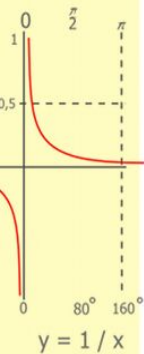
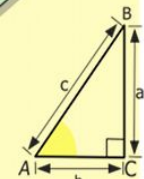
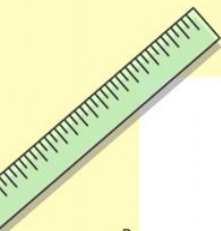
Ручка, книжка и тетрадка?

Все ли правильно сидят?

Все внимательно глядят?

Каждый хочет получить

Только лишь отметку «5».



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

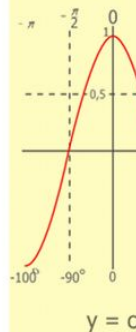
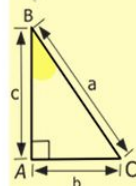
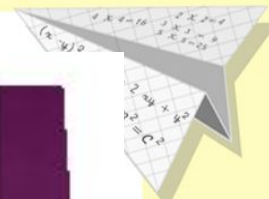
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$

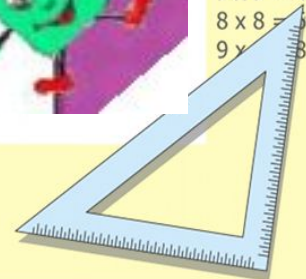


$$\begin{cases} y = \sin 50 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$

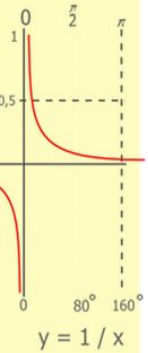
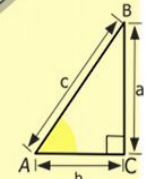
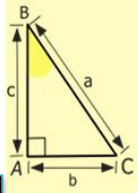
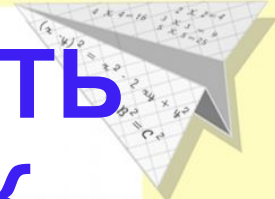
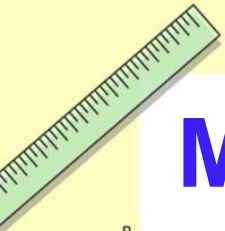


$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \\ 9 \times 9 = 81 \end{array}$$



# МАТЕМАТИКУ УЖЕ ЗАТЕМ УЧИТЬ НАДО, ЧТО ОНА УМ В ПОРЯДОК ПРИВОДИТ.

М.В.ЛОМОНОСОВ



$$\begin{array}{r} \frac{1}{2} 500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$

- $2 \times 2 = 4$
- $3 \times 3 = 9$
- $4 \times 4 = 16$
- $5 \times 5 = 25$
- $6 \times 6 = 36$
- $7 \times 7 = 49$
- $8 \times 8 = 64$
- $9 \times 9 = 81$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

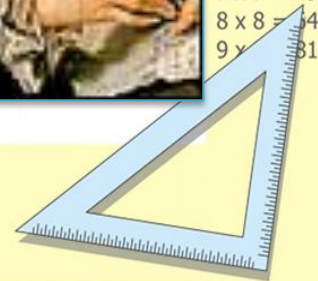
$\sin 90^\circ = 1$



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

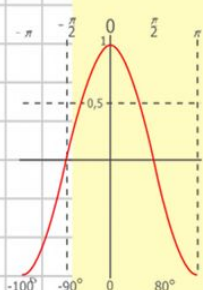
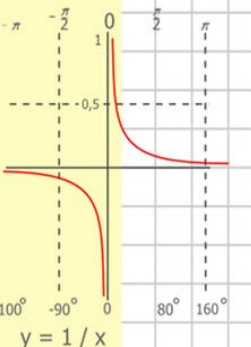
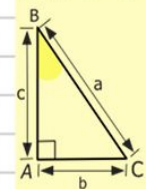
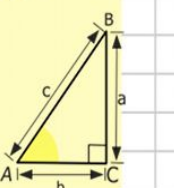
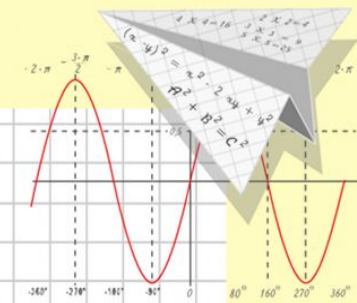
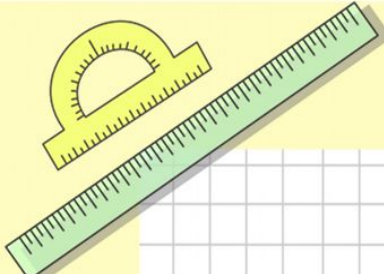
$$(x+y)(x-y) = x^2 - y^2$$



# Математик

## а ТЕМА:

### Сложение и вычитание смешанных чисел с одинаковым знаменателем.



$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ 10500 \end{array}$$

$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

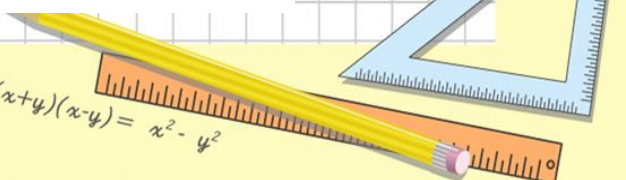
www.LibraryOfImages.com · 473

$$\sin 90^\circ = 1$$



$$\begin{cases} y = \sin 50 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$

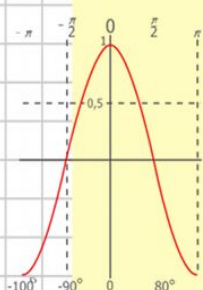
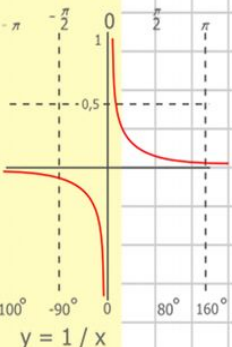
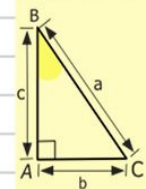
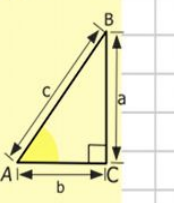
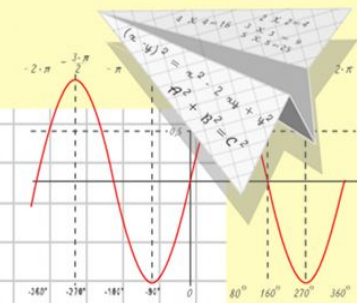
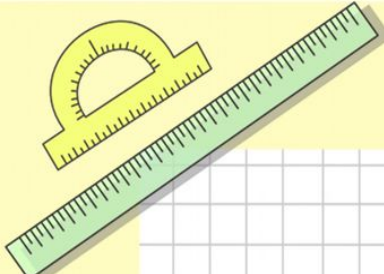


# Математик

а

## ЦЕЛЬ:

1. Вспомнить что такое смешанное число.
2. Научить учащихся складывать и вычитать смешанные числа.



$$\begin{array}{r} 12500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$

$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

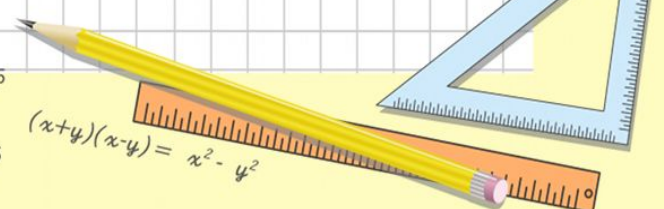
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$



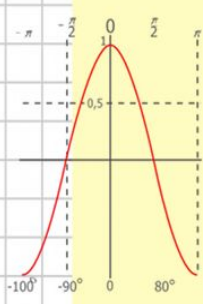
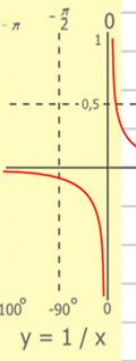
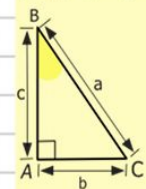
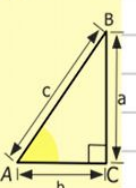
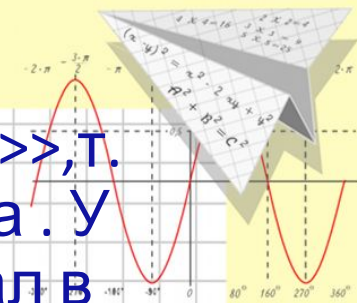
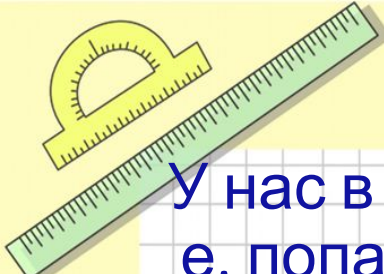
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$



# Математик

У нас в народе, есть поговорка «Попал в тупик», т.е. попал в такое положение, откуда нет выхода. У немцев аналогичная поговорка гласит: «Попал в дробь». Она означает, что человек, попавший в дробь, попал в трудное положение. Эта поговорка напоминает о тех временах, когда дроби считали самым трудным, запутанным разделом математики, т.к. общих приёмов действий с дробями и записи дробей не было. Мы начинаем изучать их уже в младших классах. Задача нашего урока-показать что дроби не смогут поставить нас в трудное положение. Будем уверенно складывать и вычитать их.



$$\begin{array}{r} 1 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

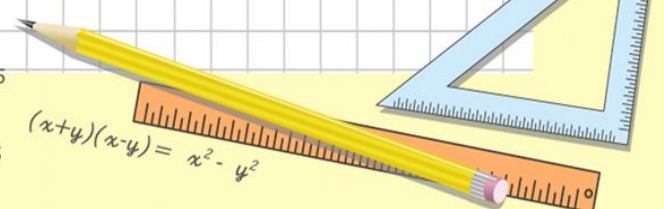
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$



$$\sin 90^\circ = 1$$



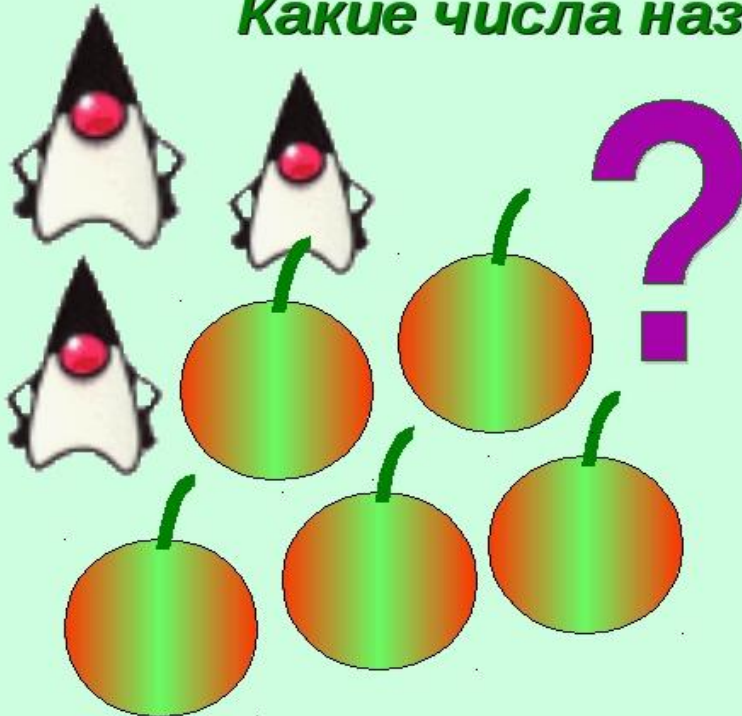
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$



$$(x+y)(x-y) = x^2 - y^2$$

# Помоги Зюкам!

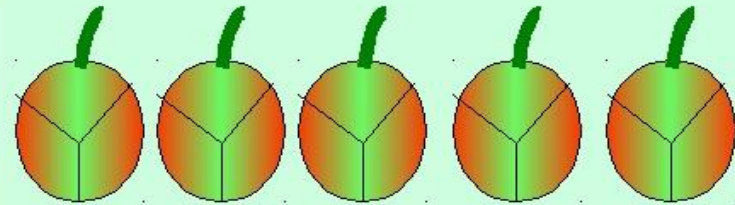
Какие числа называются смешанными?



Как поровну  
разделить 5  
одинаковых яблок  
между тремя  
«Зюками»?

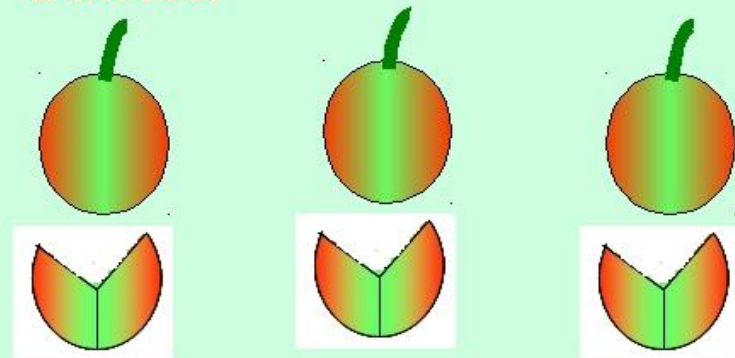


1 способ.

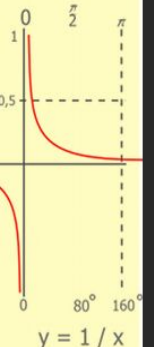
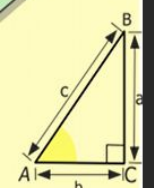
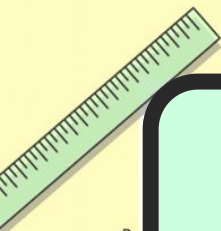


Каждый получит  $\frac{5}{3}$  яблока

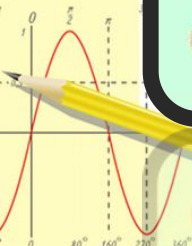
2 способ.



Каждый получит  $1\frac{2}{3}$  яблока 5



$$\begin{array}{r} 1\ 2\ 5\ 00 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105\ 000 \end{array}$$



$$\frac{a}{A} = \frac{b}{B} = \frac{c}{C}$$

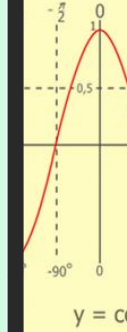
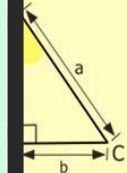
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$



$$\begin{cases} y = 1 \\ x = 25 + 45 \\ x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$

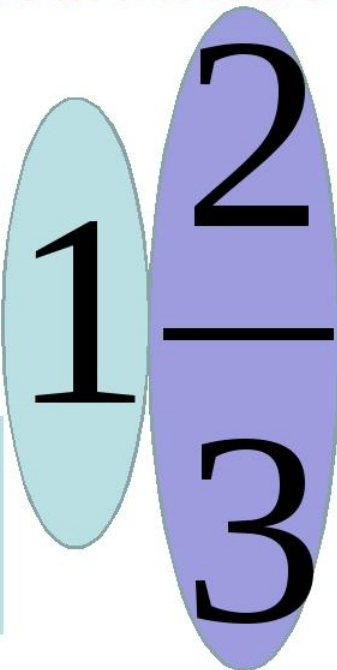


$$\begin{array}{l} \times 2 = 4 \\ \times 3 = 9 \\ \times 4 = 16 \\ \times 5 = 25 \\ \times 6 = 36 \\ \times 7 = 49 \\ \times 8 = 64 \\ \times 9 = 81 \end{array}$$



# Какие числа называются смешанными?

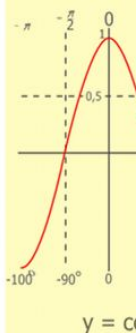
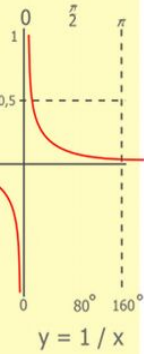
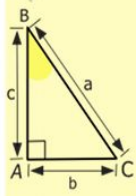
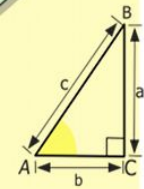
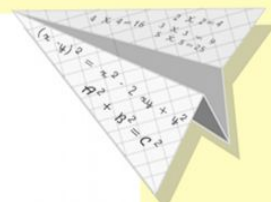
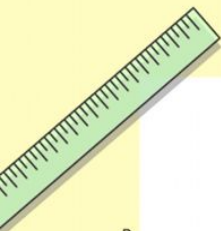
## Смешанное число



Целая часть

Дробная часть

Смешанными числами называют числа состоящие из целой и дробной части.



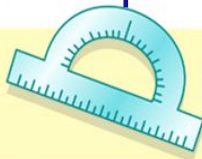
$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81



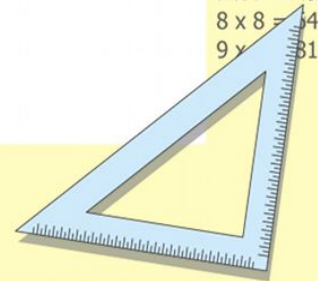
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$



# Математик

## а Прочитай и найди смешанные числа.

$\frac{1}{4}$  ;  $2\frac{2}{3}$  ;  $\frac{7}{7}$  ;  $\frac{11}{9}$  ;  $5\frac{1}{8}$  ;  $\frac{12}{57}$  ;  $\frac{13}{11}$  ;  
 $\frac{81}{100}$  ;  $\frac{6}{5}$  ;  $\frac{23}{15}$  ;  $17\frac{1}{2}$  ;  $\frac{17}{15}$  ;  $\frac{88}{88}$  ;  $\frac{33}{95}$

Ответ:

$2\frac{2}{3}$      $5\frac{1}{8}$      $17\frac{1}{2}$

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$

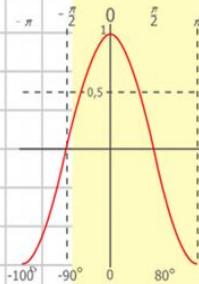
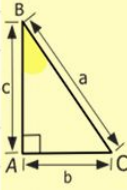
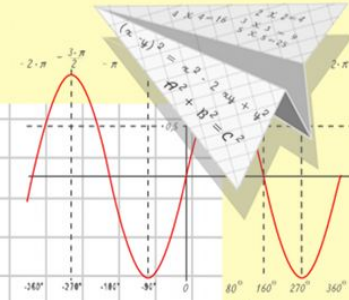
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$x = 70$$

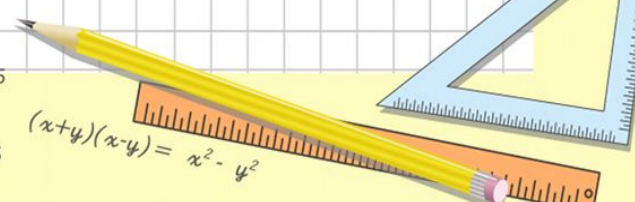
$$(x+y)(x-y) = x^2 - y^2$$

$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$



$$y = \cos x$$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64





# Вспомним как из неправильной дроби выделить целую часть:

## ПРАВИЛО:

- 1) Разделить с остатком числитель на знаменатель.
- 2) Неполное частное будет целой частью.
- 3) Остаток (если он есть) даёт числитель, а делитель - знаменатель дробной части.

## ПРИМЕР:

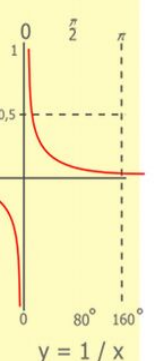
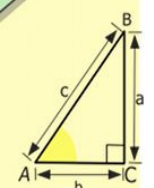
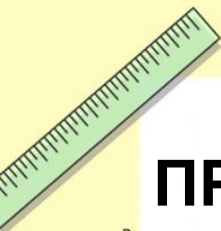
знаменатель

$$\begin{array}{r} 47 \\ \underline{45} \\ 2 \end{array} \quad \left| \quad \begin{array}{r} 9 \\ \underline{5} \\ \phantom{0} \end{array} \right.$$

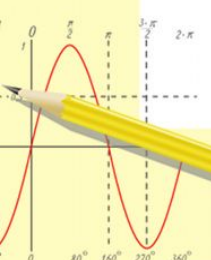
числитель

целая часть

Значит,  $\frac{47}{9} = 5\frac{2}{9}$



$$\begin{array}{r} 1 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$



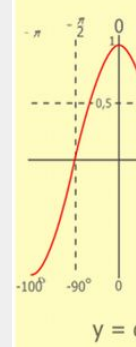
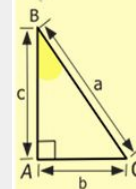
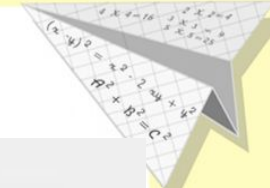
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$

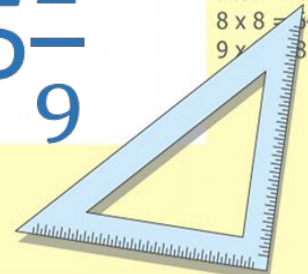


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$
$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$



$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \\ 9 \times 9 = 81 \end{array}$$



# Математик

Каждой **не**правильной дроби найдите соответствующее смешанное число?

$$\frac{10}{4}$$

$$\frac{7}{2} \quad 5\frac{2}{9}$$

$$3\frac{1}{2}$$

$$4\frac{2}{6}$$

$$\frac{26}{6}$$

$$1\frac{1}{3}$$

$$2\frac{2}{4}$$

$$\frac{4}{3}$$

$$\frac{47}{9}$$

Ответ:  $\frac{4}{3} = 1\frac{1}{3}$ ;  $\frac{7}{2} = 3\frac{1}{2}$ ;  $\frac{10}{4} = 2\frac{2}{4}$ ;  
 $\frac{47}{9} = 5\frac{2}{9}$ ;  $\frac{26}{6} = 4\frac{2}{6}$ .

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

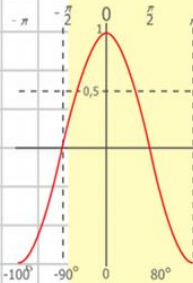
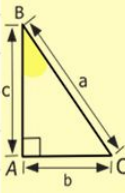
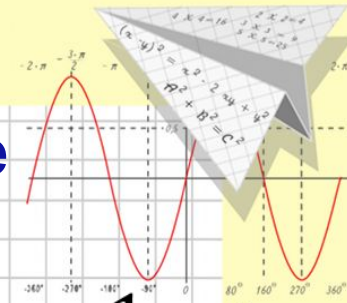
$$\sin 90^\circ = 1$$

$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

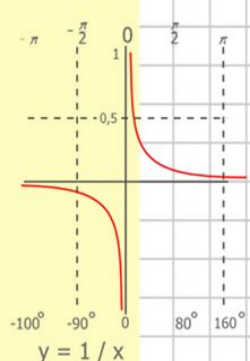
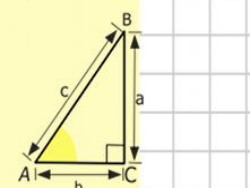
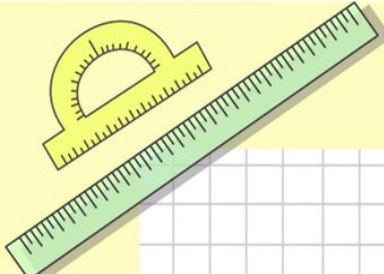
$$x = 70$$

$$(x+y)(x-y) = x^2 - y^2$$

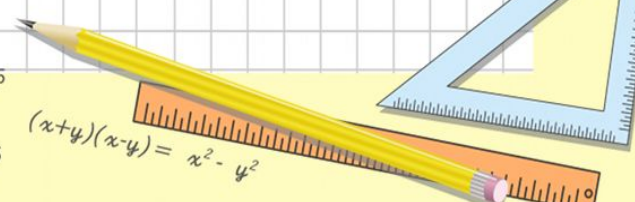


$$y = \cos x$$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64



$$\begin{array}{r} 12500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

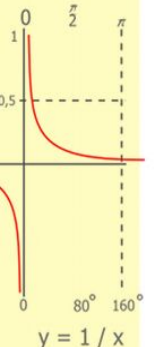
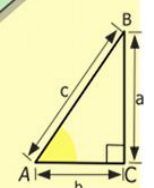
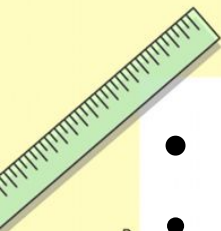


# Вспомни как представить смешанное число в виде неправильной дроби:

- **ПРАВИЛО:**
- 1) Умножить его целую часть на знаменатель дробной части;
- 2) К полученному произведению прибавить числитель дробной части;
- 3) Записать полученную сумму числителем дроби, а знаменатель дробной части оставить без изменения.

- **ПРИМЕР:**

$$2\frac{3}{4} = \frac{2 * 4 + 3}{4} = \frac{11}{4}$$



$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$



$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

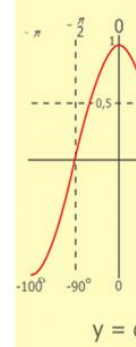
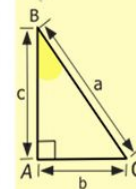
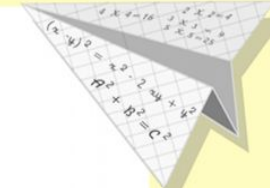
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$

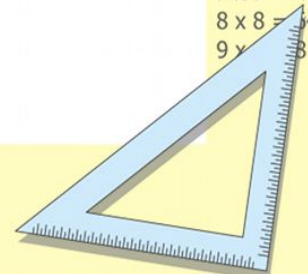


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$
$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$



$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \\ 9 \times 9 = 81 \end{array}$$



# Математик

## Переведите смешанные числа в неправильные дроби:

1)  $2\frac{4}{10}$

2)  $3\frac{4}{9}$

3)  $4\frac{8}{9}$

4)  $7\frac{2}{4}$

Ответ: 1)  $\frac{24}{10}$ ;

2)  $\frac{31}{9}$ ;

3)  $\frac{44}{9}$ ;

4)  $\frac{30}{4}$ .

$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$

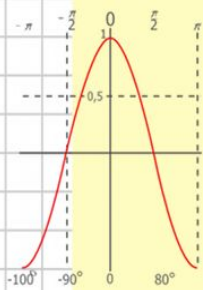
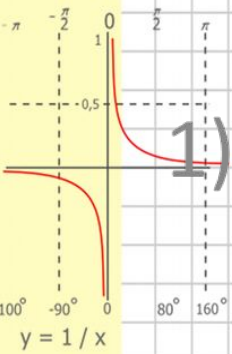
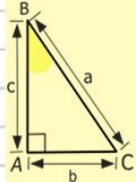
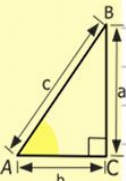
$\sin 90^\circ = 1$

$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$

$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$

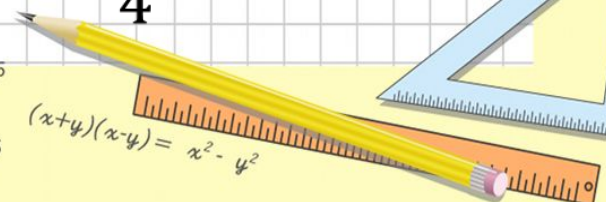
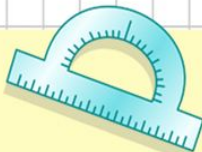
$x = 70$

$(x+y)(x-y) = x^2 - y^2$



$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$

$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$



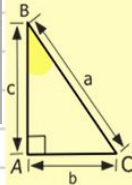
# Математик

а

## ЗАПОМНИ!

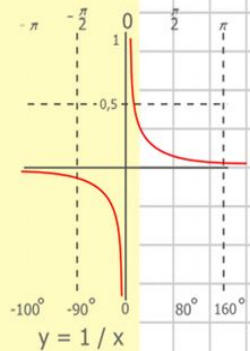
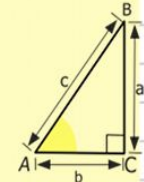
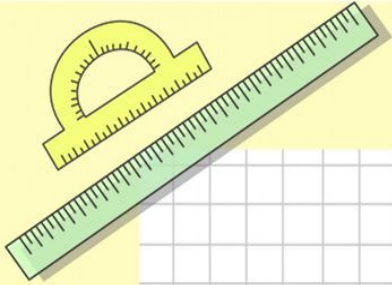
Чтобы сложить смешанные числа, нужно:

- 1) Отдельно сложить целые части;
- 2) Отдельно сложить дробные части;
- 3) Сложить целую и дробную части.

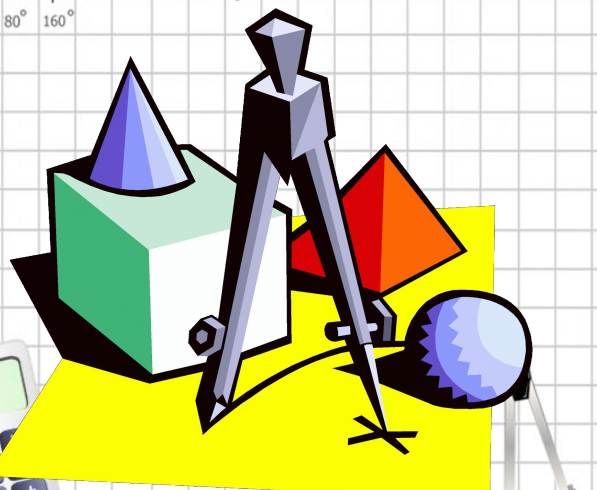


$$y = \cos x$$

- $2 \times 2 = 4$
- $3 \times 3 = 9$
- $4 \times 4 = 16$
- $5 \times 5 = 25$
- $6 \times 6 = 36$
- $7 \times 7 = 49$
- $8 \times 8 = 64$



$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

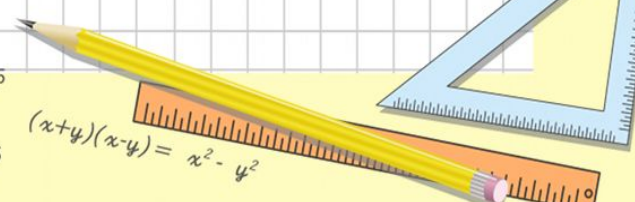
$$\sin 90^\circ = 1$$



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$\frac{x}{70}$$



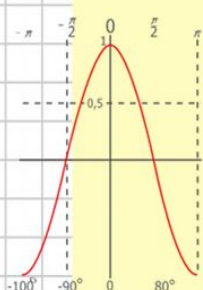
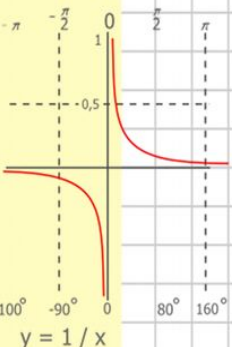
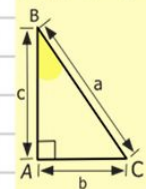
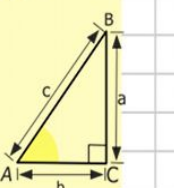
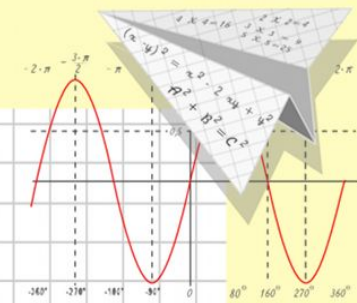
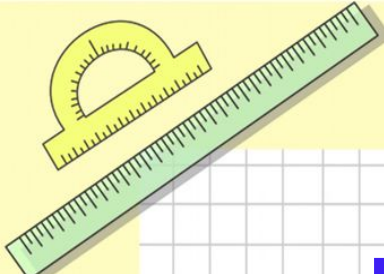
$$(x+y)(x-y) = x^2 - y^2$$

# Математик

а

## Выполним сложение:

$$1\frac{7}{13} + 3\frac{6}{13} = (1+3) + \left(\frac{7}{13} + \frac{6}{13}\right) = 4\frac{13}{13} = 5$$



$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

- $y = \cos x$
- $2 \times 2 = 4$
- $3 \times 3 = 9$
- $4 \times 4 = 16$
- $5 \times 5 = 25$
- $6 \times 6 = 36$
- $7 \times 7 = 49$
- $8 \times 8 = 64$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

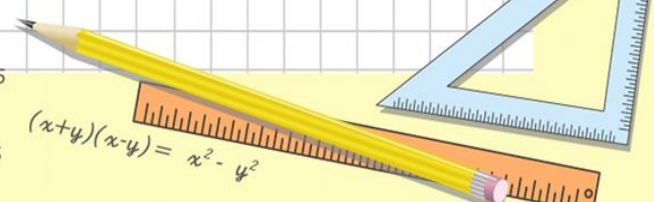
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$



$$(x+y)(x-y) = x^2 - y^2$$

**РЕШИТЕ:**

Решение:  $1\frac{2}{3} +$

$$1\frac{1}{3} = (1+1) + (\frac{2}{3} + \frac{1}{3}) = 2 + \frac{3}{3} =$$

3(кг)

Один мышонок съел  $1\frac{2}{3}$  кг сыра,  
а другой на  $1\frac{1}{3}$  кг сыра больше.

Сколько килограмм сыра съел  
второй мышонок?



$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

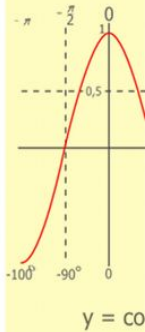
$$\sin 90^\circ = 1$$

$$\begin{cases} x = 25y + 45 \\ y = 1 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$x = 70$$

$$(x+y)(x-y) = x^2 - y^2$$



- $2 \times 2 = 4$
- $3 \times 3 = 9$
- $4 \times 4 = 16$
- $5 \times 5 = 25$
- $6 \times 6 = 36$
- $7 \times 7 = 49$
- $8 \times 8 = 64$
- $9 \times 9 = 81$

## Решите.

Решение: 1)  $2\frac{3}{5} + 1\frac{4}{5} = 3 + \frac{7}{5} = 3 + 1\frac{2}{5} = 4\frac{2}{5}$  (ч) - катался на коньках.

$$2\frac{3}{5} + 4\frac{2}{5} = 6\frac{5}{5} = 7 \text{ (ч)}$$

В один из дней зимних каникул мальчик

$2\frac{3}{5}$  ч катался на лыжах, а на коньках на  $1\frac{4}{5}$  ч больше.

Сколько времени он катался на лыжах и коньках?



$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$

$$\begin{cases} x = 25y + 45 \\ y = 1 \end{cases}$$

$$\begin{cases} x = 25 + 45 \\ x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81

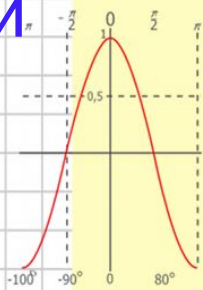
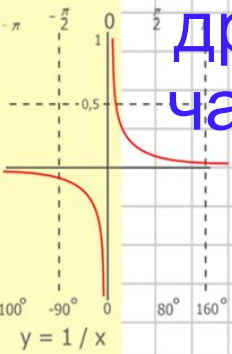
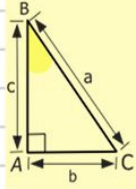
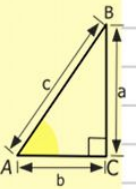
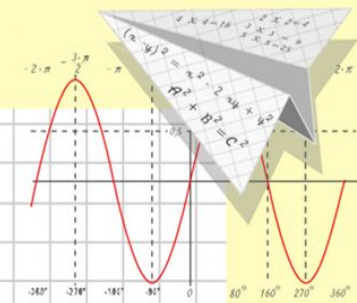
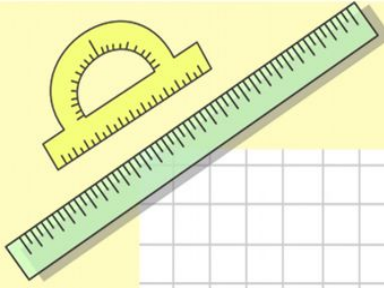


# Математик

## а ЗАПОМНИ!

Иногда при сложение смешанных чисел в их дробной части получается неправильная дробь. В этом случае из неё выделяют целую часть и добавляют её к уже имеющейся целой части.

$$\text{Например: } 3\frac{7}{9} + 2\frac{4}{9} = 5\frac{11}{9} = 5 + \frac{11}{9} = 5 + 1\frac{2}{9} = 6\frac{2}{9}$$



$$\begin{array}{r} 12500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

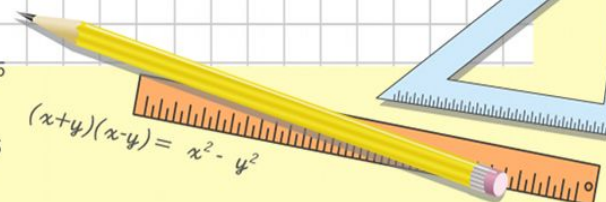


$$\sin 90^\circ = 1$$



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ x = 70 \end{cases}$$



$$(x+y)(x-y) = x^2 - y^2$$

# Математик

а  
Решите примеры.

$$1) 7\frac{2}{6} + 2\frac{3}{6} = ?$$

$$2) 5\frac{2}{4} + 8\frac{3}{4} = ?$$

$$\rightarrow 11\frac{8}{4}, \rightarrow 1\frac{1}{4}$$

Ответ:  $9\frac{5}{6}$ ;  $14\frac{1}{4}$ ; 16.

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

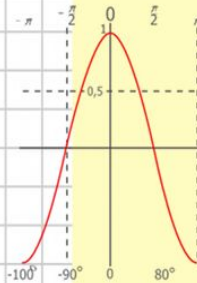
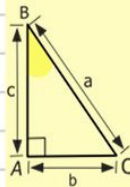
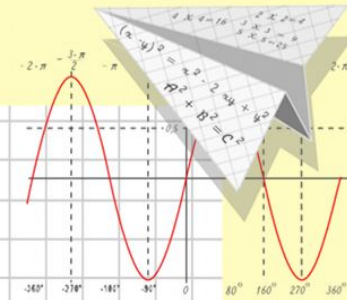
$$\sin 90^\circ = 1$$

$$\begin{cases} y = \sin 90^\circ \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

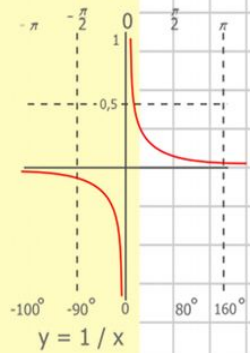
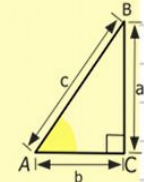
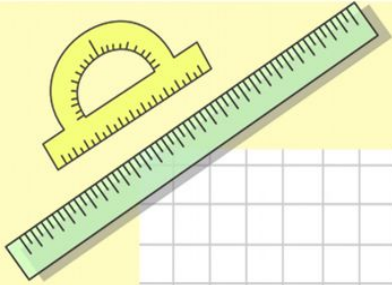
$$x = 70$$

$$(x+y)(x-y) = x^2 - y^2$$

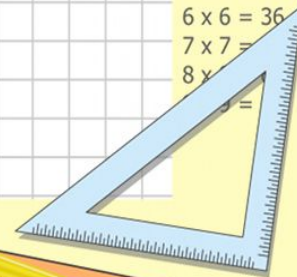
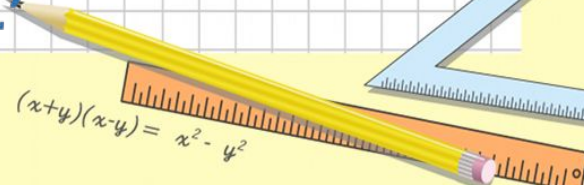


$$y = \cos x$$

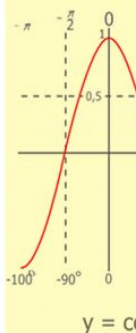
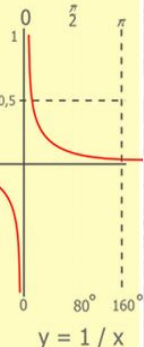
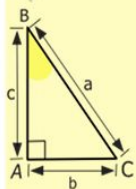
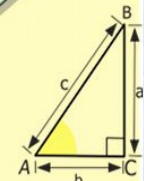
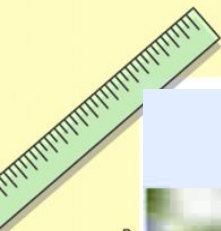
- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$



# ФИЗКУЛЬТМИНУТКА.



$$\begin{array}{r} 1 \\ \times 2500 \\ 2500 \\ + 42 \\ 210 \\ + 84 \\ \hline 105000 \end{array}$$

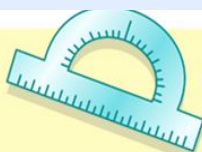
- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

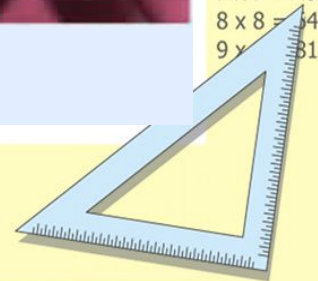
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$



$$\begin{cases} x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

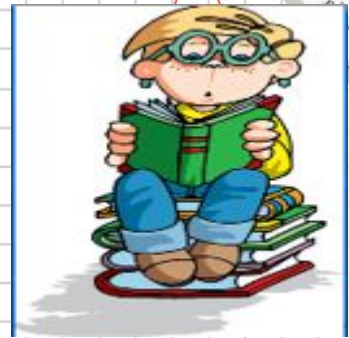
$$(x+y)(x-y) = x^2 - y^2$$



# Математик

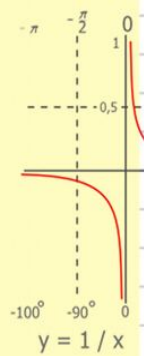
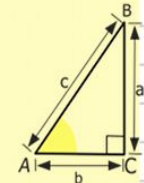
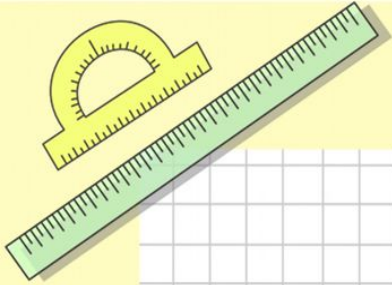
а

## Запомни!

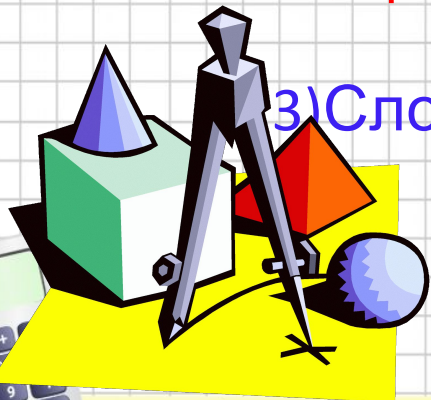


Чтобы выполнить вычитание смешанных чисел, нужно:

- 1) Отдельно выполнить вычитание целых частей;
- 2) Отдельно выполнить вычитание дробных частей; если дробная часть уменьшаемого меньше дробной части вычитаемого, превратить её в неправильную дробь, уменьшив на единицу целую часть;
- 3) Сложить целую и дробную части.



$$\begin{array}{r} \frac{1}{2} 500 \\ \times 42 \\ \hline 210 \\ + 840 \\ \hline 10500 \end{array}$$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

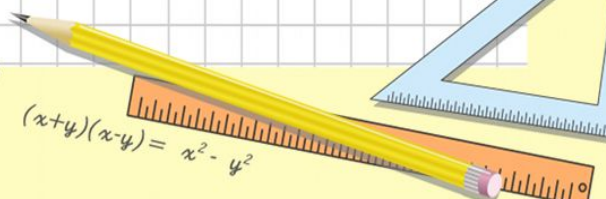
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$

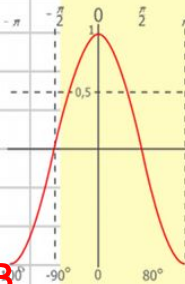
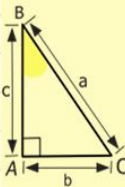


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$



$$(x+y)(x-y) = x^2 - y^2$$



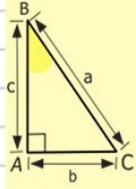
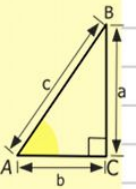
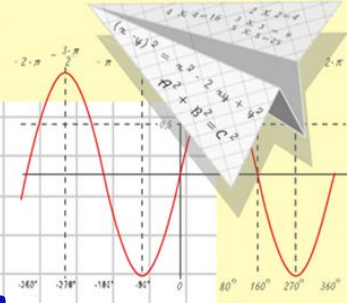
$$y = \cos x$$

$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$$

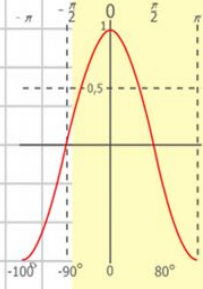
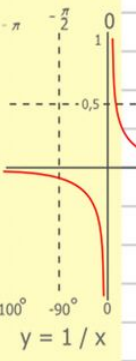
# Математик

а

## Выполним вычитание.



$$2\frac{3}{5} - 1\frac{2}{5} = 2 + \frac{3}{5} - \left(1 + \frac{2}{5}\right) = 2 + \frac{3}{5} - 1 - \frac{2}{5} = (2-1) + \left(\frac{3}{5} - \frac{2}{5}\right) = 1 + \frac{1}{5} = 1\frac{1}{5}$$



$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

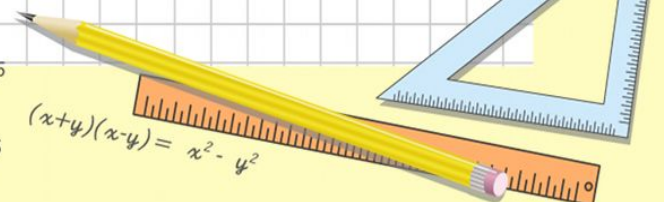
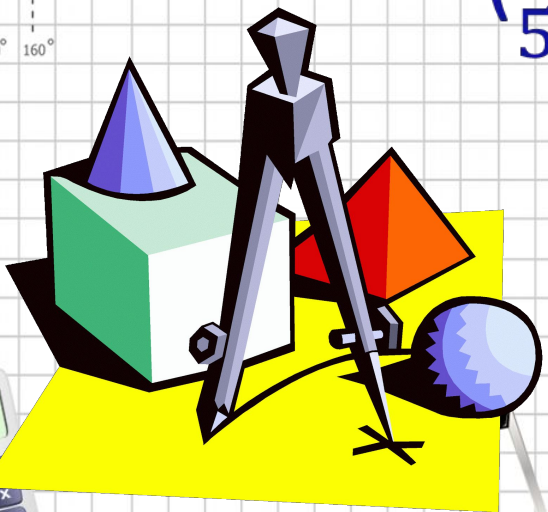
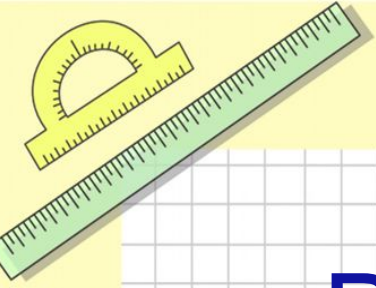
$$\sin 90^\circ = 1$$

$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$x = 70$$

$$(x+y)(x-y) = x^2 - y^2$$



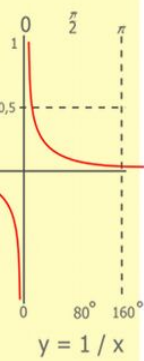
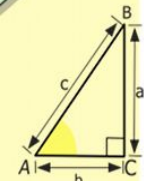
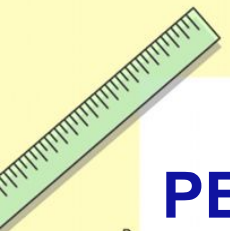
# РЕШИТЕ.

Решение:  $10\frac{7}{9} - 2\frac{2}{9} = (10 - 2) + (\frac{7}{9} - \frac{2}{9}) = 8 + \frac{5}{9} = 8\frac{5}{9}(\text{м})$

# ЗАДАЧА 1



Длина удава  $10\frac{7}{9}$  м и он длиннее своей бабушки на  $2\frac{2}{9}$  м. Какова длина бабушки удава?



$$\begin{array}{r} 1\ 2\ 5\ 00 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105\ 000 \end{array}$$



$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C} \quad \frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

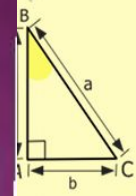
$\sin 90^\circ = 1$



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

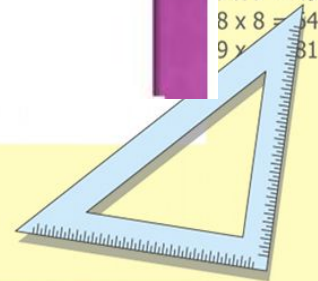
$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$



$y = \cos$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81



**РЕШИТЕ.**

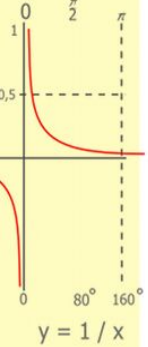
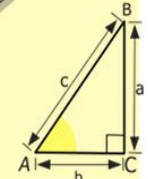
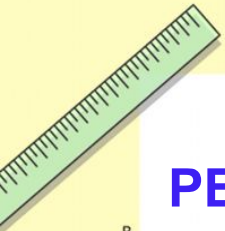
Решение:  $36\frac{2}{5}$  -

$35\frac{1}{5} = 1\frac{1}{5} \text{ (км/ч)}$

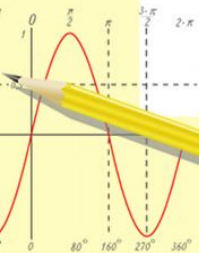
**Задача**

Акула-мако плывет с максимальной скоростью  $35\frac{1}{5}$  километра в час, а голубая акула -  $36\frac{2}{5}$  километра в час.

На сколько скорость голубой акулы больше?



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

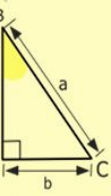
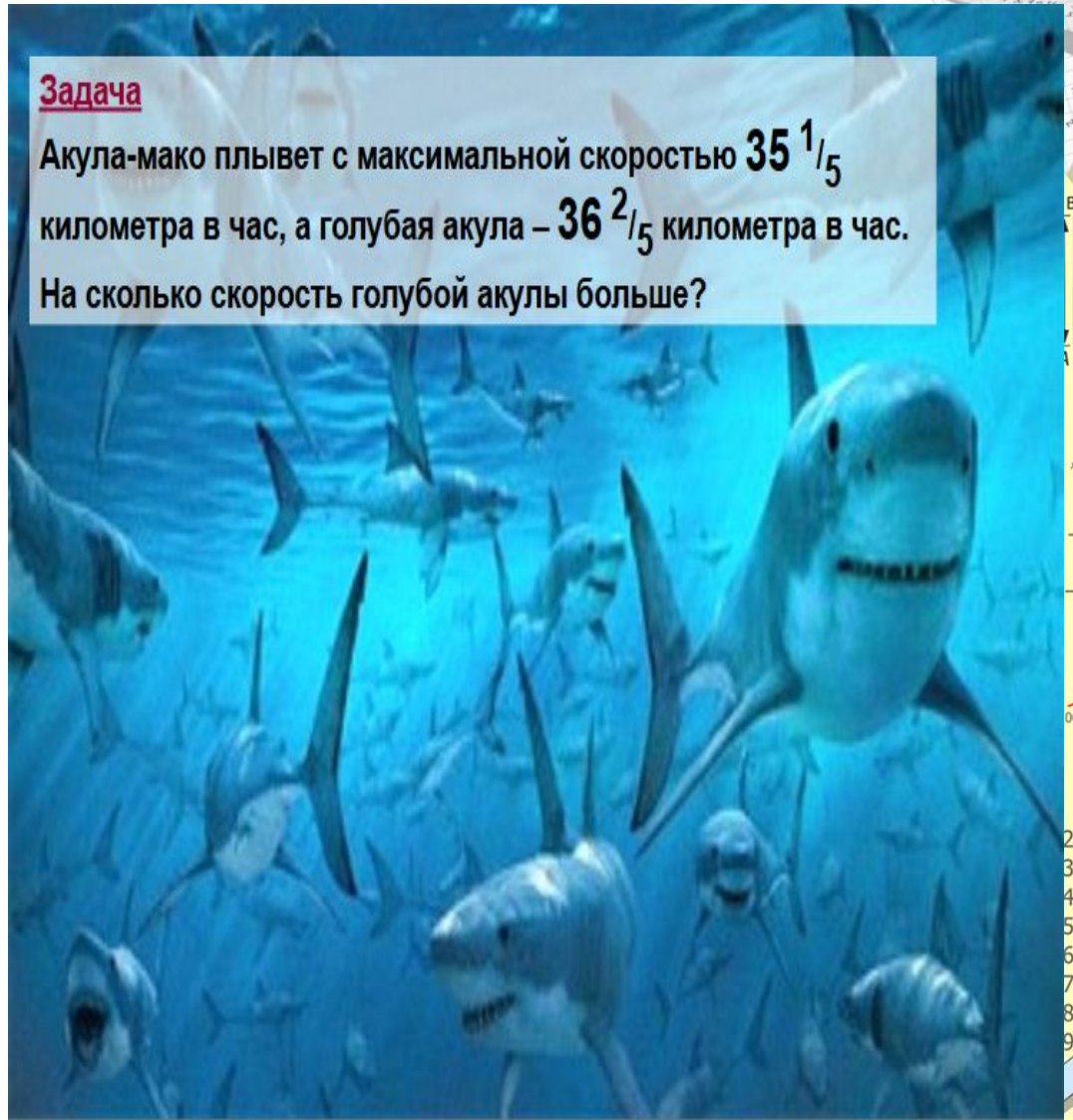
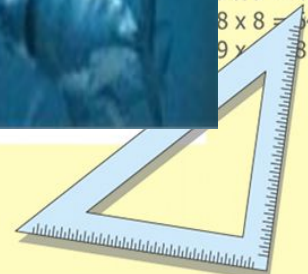
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$\sin 90^\circ = 1$



$$\begin{cases} x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$



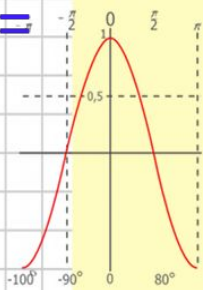
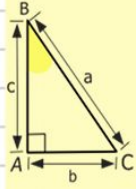
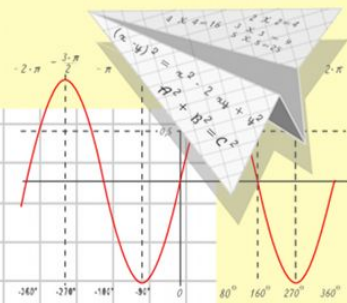
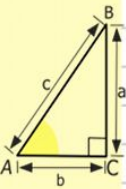
- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81

# Математик Повторенье-мать ученья!!!!!!

Если при вычитание смешанных чисел дробная часть  
уменьшаемого меньше дробной части вычитаемого,  
поступают так:

$$6\frac{3}{7} - 2\frac{5}{7} = (6 + \frac{3}{7}) - 2\frac{5}{7} = (5 + 1 + \frac{3}{7}) - 2\frac{5}{7} = (5 + 1\frac{3}{7}) - 2\frac{5}{7} =$$

$$(5 + \frac{10}{7}) - 2\frac{5}{7} = 5\frac{10}{7} - 2\frac{5}{7} = 3\frac{5}{7}$$



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$$



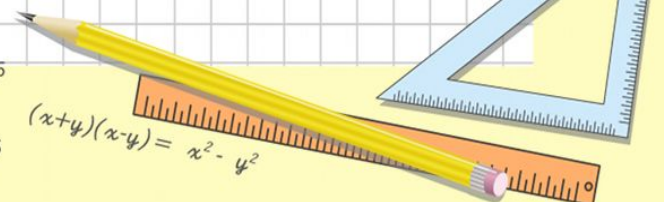
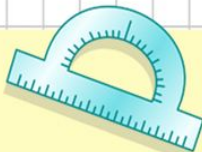
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$

$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$





# Математик

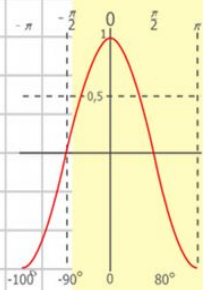
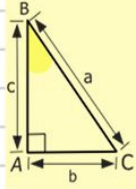
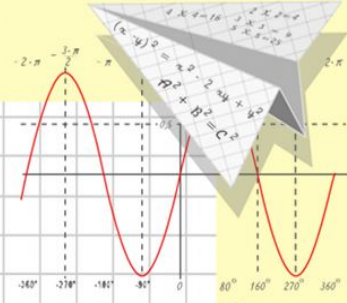
## а Решите примеры.

$$1) 5\frac{2}{4} - 1\frac{3}{4} = ?$$

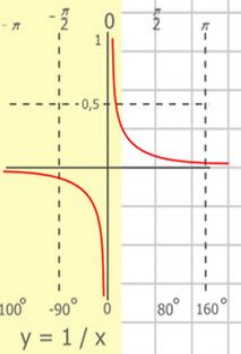
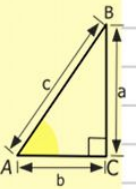
$$2) 8\frac{7}{9} - 5\frac{8}{9} = ?$$

$$3) 10\frac{5}{8} - 3\frac{7}{8} = ?$$

ОТВЕТ:  $3\frac{3}{4}$ ;  $2\frac{8}{9}$ ;  $6\frac{6}{8}$



- $y = \cos x$
- $2 \times 2 = 4$
- $3 \times 3 = 9$
- $4 \times 4 = 16$
- $5 \times 5 = 25$
- $6 \times 6 = 36$
- $7 \times 7 = 49$
- $8 \times 8 = 64$



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

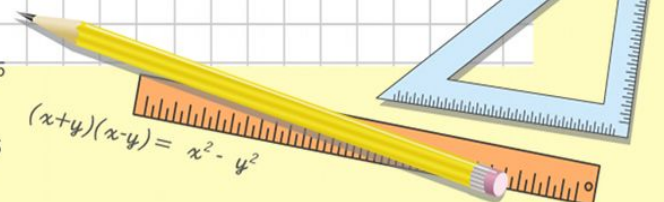
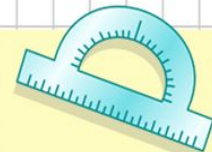
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$

$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$

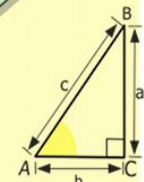
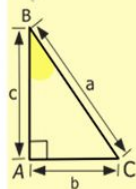
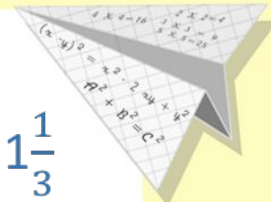
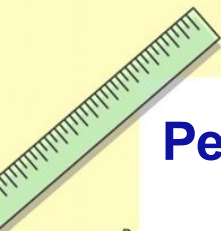


**Решите.**

Решение:  $1\frac{1}{3} - \frac{2}{3} = \frac{4}{3} - \frac{2}{3} = \frac{2}{3}$  (ч)

Один мотоциклист проезжает расстояние от деревни до города за  $1\frac{1}{3}$  ч, а второй это же расстояние на  $\frac{2}{3}$  меньше.

За какое время это расстояние проезжает второй мотоциклист?



$$\begin{array}{r} 1 \\ \times 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81

$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

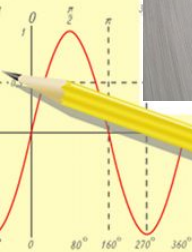
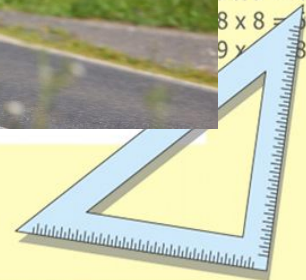
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

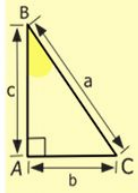
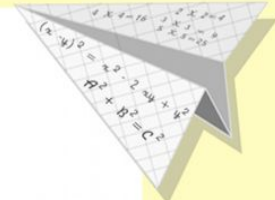
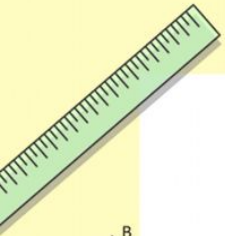
$$\sin 90^\circ = 1$$



$$\begin{cases} x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

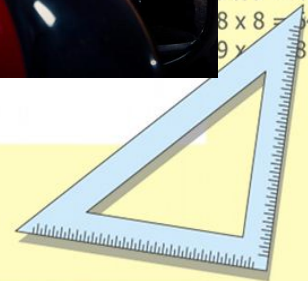
$$(x+y)(x-y) = x^2 - y^2$$





$$y = \cos$$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

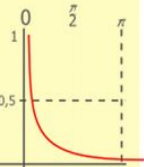
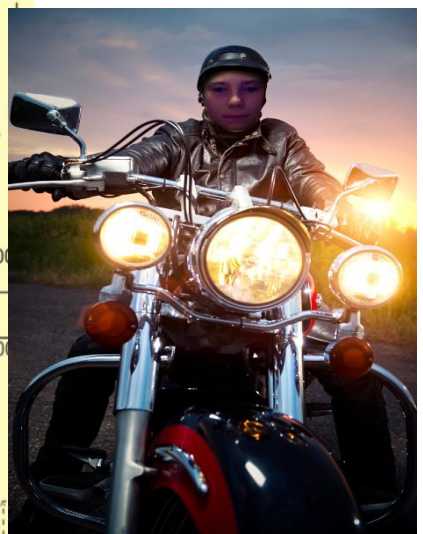
$$(x+y)(x-y) = x^2 - y^2$$

$$\sin 90^\circ = 1$$



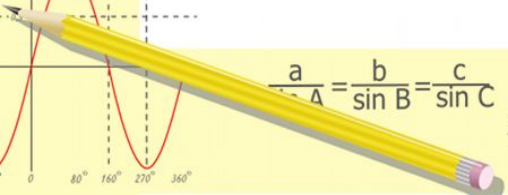
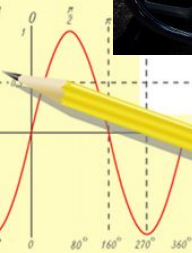
$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

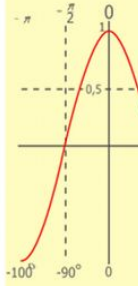
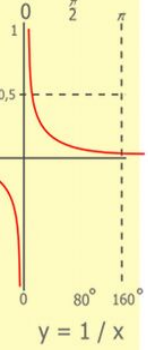
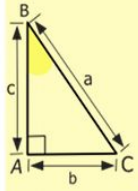
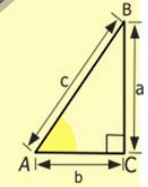
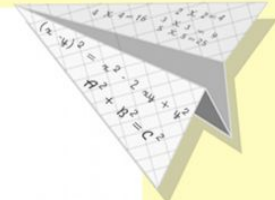
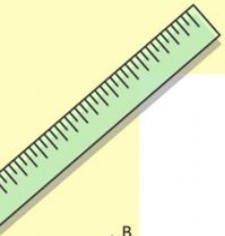
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$



$$y = 1 /$$

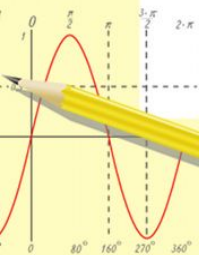
$$\begin{array}{r} 1 \\ \times 2500 \\ \hline 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$





$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

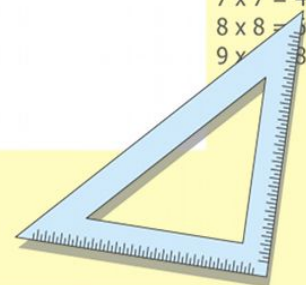
$$\sin 90^\circ = 1$$



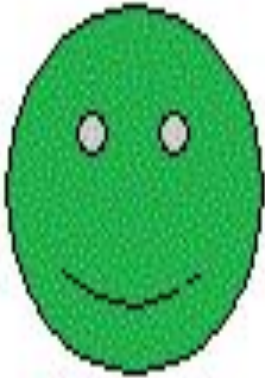
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$



# Какое настроение у тебя после презентации?



Хорошее



Среднее



Плохое



$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

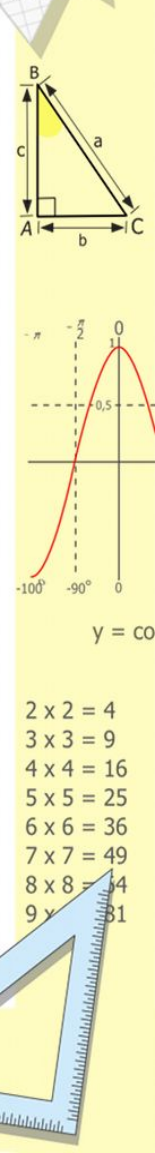
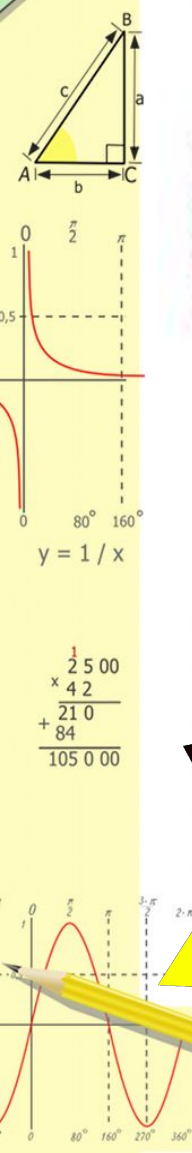
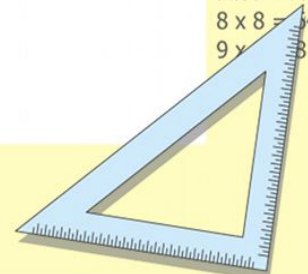
$$\sin 90^\circ = 1$$



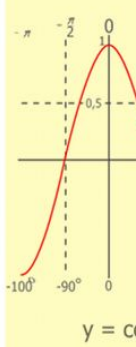
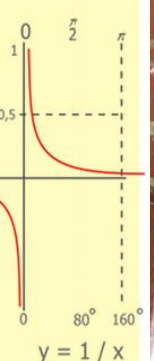
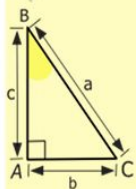
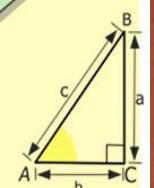
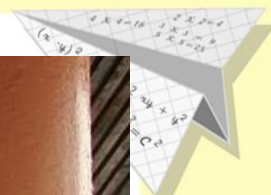
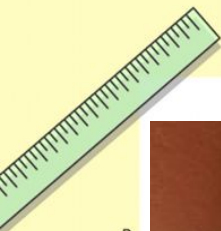
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$



# УРОК ОКОНЧЕН.



$$\begin{array}{r} 1 \\ \times 2500 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$

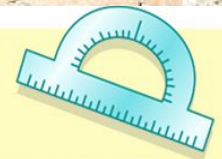
- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$



$$\begin{cases} x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$

