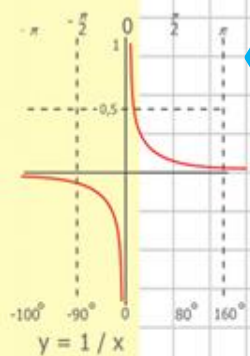
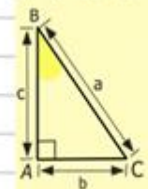
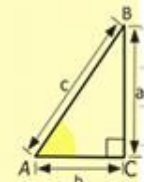
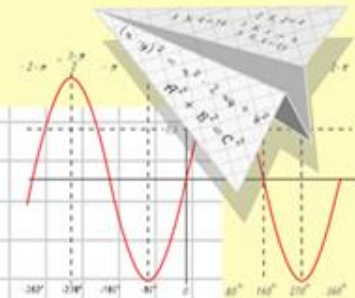
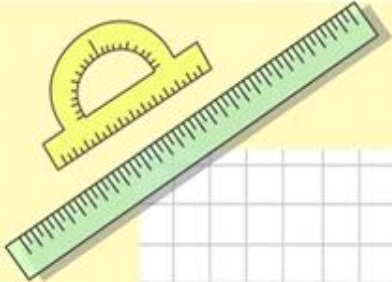


# Математика

## «Умножение обыкновенных дробей»

»



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

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



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

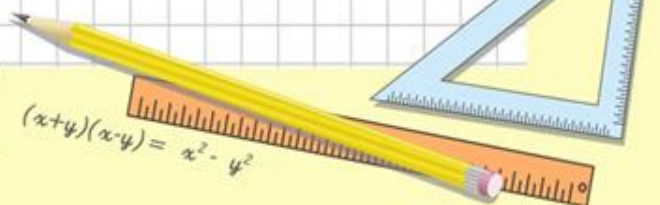
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$



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

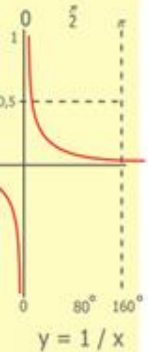
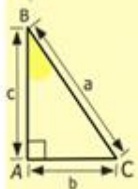
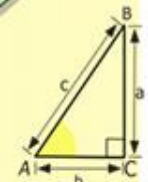
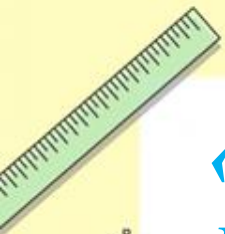


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ x = 70 \end{cases}$$



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

«Чтобы спорилось нужное дело,  
 Чтобы в жизни не знать неудач,  
 Мы в поход отправляемся смело,  
 В мир загадок и сложных задач.  
 Не беда что идти далеко  
 Не боимся, что путь будет труден  
 Достижения крупные людям  
 Никогда не давались легко».



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

- 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



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

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

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



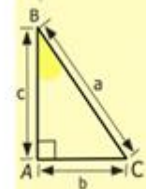
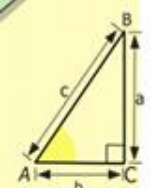
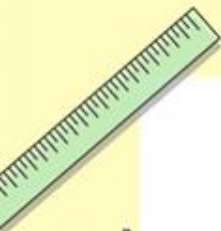
$$\begin{cases} y = \sin 90^\circ \\ x = 25y \end{cases}$$

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

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



- Расскажите, как умножить дробь на натуральное число.
- Расскажите, как выполнить умножение обыкновенных дробей.



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

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
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- 7 x 7 = 49
- 8 x 8 = 64
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$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

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

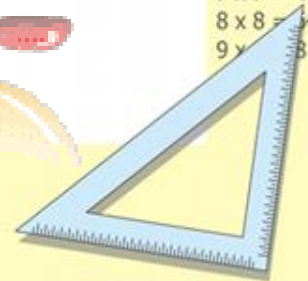
$$\sin 90^\circ = 1$$



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

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

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



# Устный счет

$$1) \frac{5}{2} \cdot \frac{1}{4};$$

$$2) \frac{1}{4} \cdot \frac{5}{4};$$

$$1) \frac{3}{2} \cdot \frac{1}{4};$$

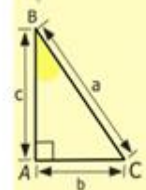
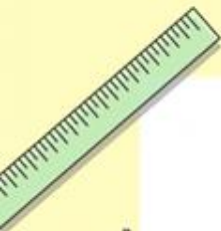
$$2) \frac{1}{3} \cdot \frac{4}{3};$$

$$3) \frac{1}{2} \cdot \frac{1}{3};$$

$$7) \frac{2}{7} \cdot \frac{7}{12};$$

$$6) \frac{1}{4} \cdot \frac{1}{3};$$

$$7) \frac{2}{7} \cdot \frac{7}{9};$$



$$\begin{array}{r} \frac{1}{2} 500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

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



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

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

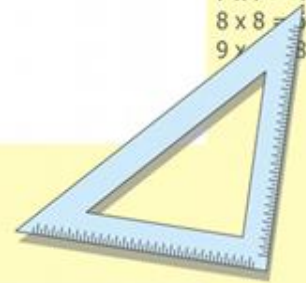
$$\sin 90^\circ = 1$$



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

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

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

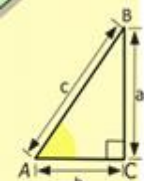
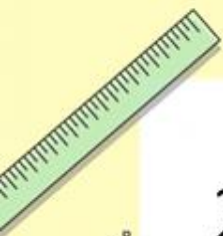




## 2. Сократите дроби:

а)  $\frac{8}{12}, \frac{12}{16}, \frac{12}{18}, \frac{24}{40}$

б)  $\frac{2}{4}, \frac{3}{9}, \frac{4}{16}, \frac{9}{45}, \frac{6}{6}$



$$\begin{array}{r} \frac{1}{2} 500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$



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

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

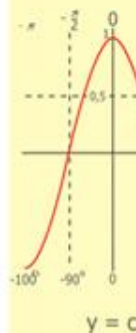
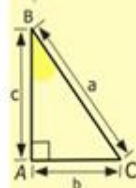
$$\sin 90^\circ = 1$$



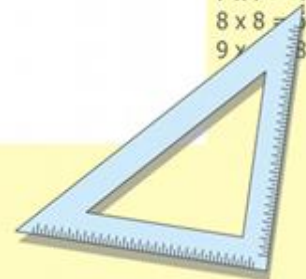
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

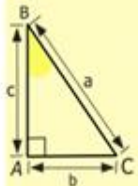
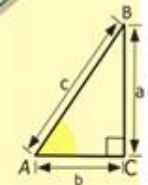
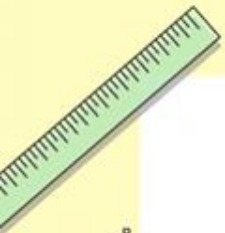
$$(x+y)(x-y) = x^2 - y^2$$



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



В вашем классе 28 учащихся. Девочки составляют  $13/28$  всех учащихся. Сколько в классе мальчиков?



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

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



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

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

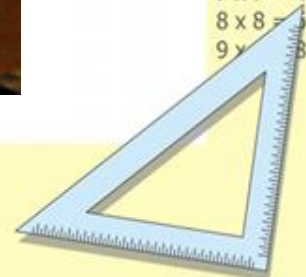
$$\sin 90^\circ = 1$$



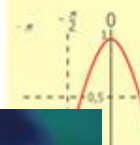
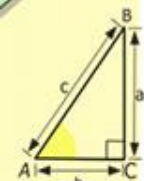
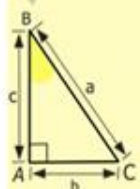
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

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



В вашем классе 28 учащихся.  
Отсутствует  $\frac{1}{7}$  всех учащихся по  
болезни. Сколько в классе  
присутствующих?



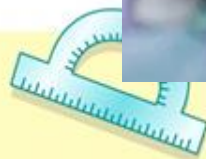
$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$



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

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

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



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

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





# Выполните умножение:



$$\frac{3}{5} \cdot \frac{2}{7} = \frac{6}{35}$$

$$\frac{1}{3} \cdot \frac{8}{9} = \frac{8}{27}$$

$$\frac{4}{5} \cdot \frac{6}{7} = \frac{24}{35}$$

$$\frac{2}{9} \cdot \frac{1}{6} = \frac{2}{54}$$

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

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

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

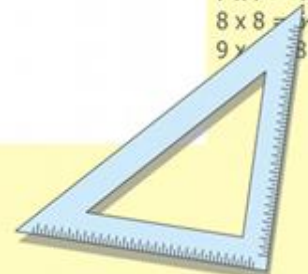


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

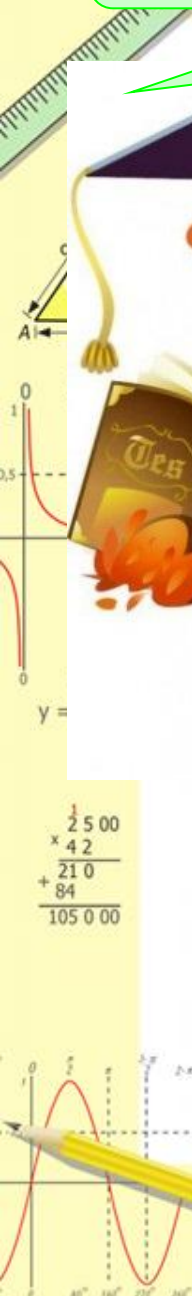
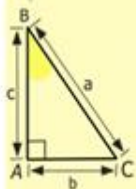
$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$x = 70$$

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

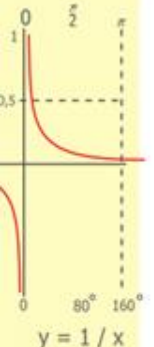
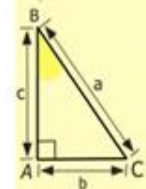
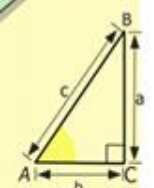


- $2 \times 2 = 4$
- $3 \times 3 = 9$
- $4 \times 4 = 16$
- $5 \times 5 = 25$
- $6 \times 6 = 36$
- $7 \times 7 = 49$
- $8 \times 8 = 64$
- $9 \times 9 = 81$





Из - за парт мы выйдем дружно,  
 Но шуметь совсем не нужно,  
 Мы все вместе улыбнемся,  
 Подмигнем слегка друг другу,  
 Вправо, влево повернемся ( повороты влево- вправо)  
 И кивнем затем по кругу. (наклоны влево-вправо)  
 Все идеи победили,  
 Вверх взметнулись наши руки. ( поднимают руки  
 вверх- вниз)  
 Груз забот с себя стряхнули  
 И продолжим путь науки.  
 ( встряхнули кистями рук)



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

- 2 x 2 = 4
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$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

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

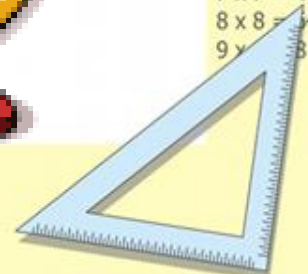
$$\sin 90^\circ = 1$$



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

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

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



# «Творческое задание»

## 1 вариант

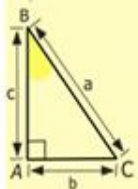
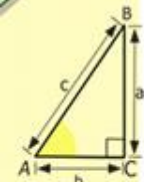
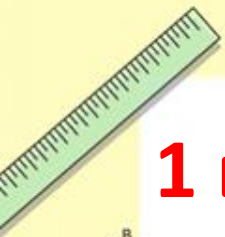
Составьте задачу, для решения которой требуется умножить:

60 на  $\frac{3}{4}$

## 2 вариант

Составьте задачу, для решения которой требуется умножить:

50 на  $\frac{4}{5}$



$$\begin{array}{r} \frac{1}{2} 500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

- $2 \times 2 = 4$
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- $6 \times 6 = 36$
- $7 \times 7 = 49$
- $8 \times 8 = 64$
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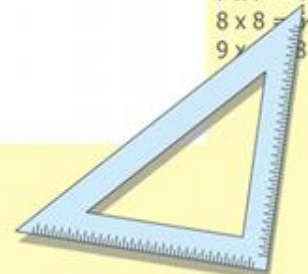
$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

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



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

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



# Графический диктант

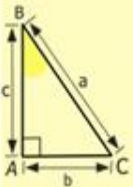
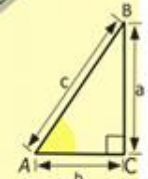
1. Чтобы умножить дробь на натуральное число нужно это число умножить на числитель и знаменатель дроби .

2. Чтобы найти периметр треугольника, нужно все стороны умножить.

3. Прямоугольник, у которого все стороны равны называется квадрат.

4. Чтобы найти периметр квадрата, нужно длину одной стороны умножить на четыре.

5. Чтобы найти площадь прямоугольника, нужно ширину и длину сложить.



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

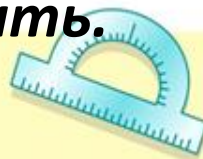
$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \\ 9 \times 9 = 81 \end{array}$$



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

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

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

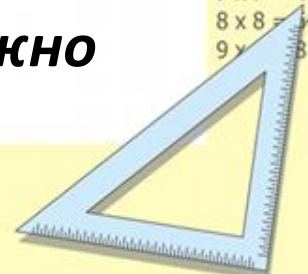


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

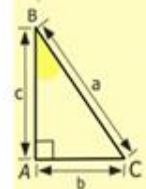
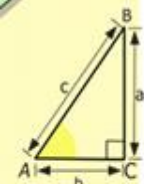
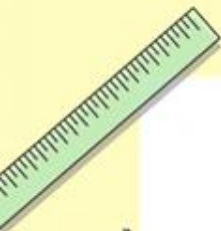
$$x = 70$$

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





# Проверка



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

- 2 x 2 = 4
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- 4 x 4 = 16
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$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

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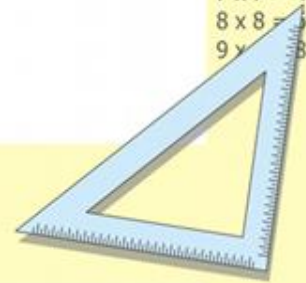
$$\sin 90^\circ = 1$$



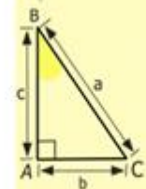
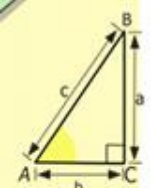
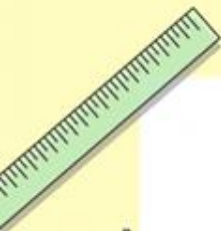
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

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



# Решение задач №910, №911.



$$\begin{array}{r} \frac{1}{2} 500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

- 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



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

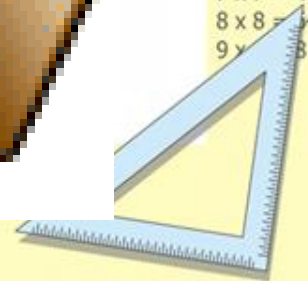
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$\sin 90^\circ = 1$



$$\frac{x = 25 + 45}{x = 70}$$

$$x^2 - y^2$$



# Самостоятельная работа

а)  $\frac{2}{5} \cdot \frac{3}{7}$

б)  $\frac{3}{4} \cdot \frac{5}{11}$

в)  $\frac{2}{9} \cdot \frac{11}{7}$

г)  $\frac{4}{5} \cdot \frac{6}{19}$

а)  $\frac{5}{7} \cdot \frac{7}{13}$

б)  $\frac{4}{9} \cdot \frac{1}{4}$

в)  $\frac{3}{8} \cdot \frac{8}{13}$

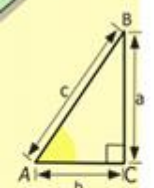
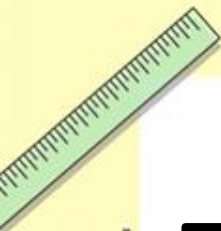
г)  $\frac{3}{7} \cdot \frac{7}{11}$

а)  $\frac{6}{25} \cdot \frac{15}{17}$

б)  $\frac{14}{15} \cdot \frac{4}{21}$

в)  $\frac{24}{25} \cdot \frac{7}{36}$

г)  $\frac{5}{24} \cdot \frac{16}{17}$



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



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

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

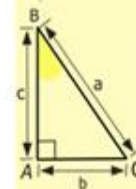
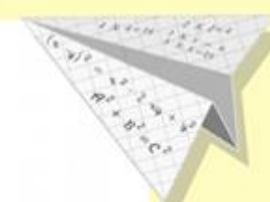
$\sin 90^\circ = 1$



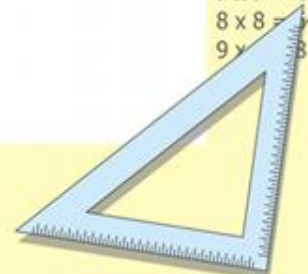
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

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



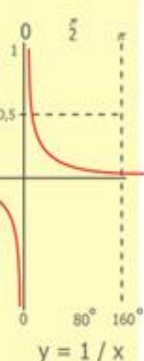
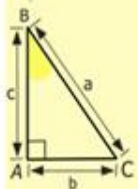
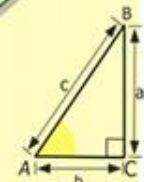
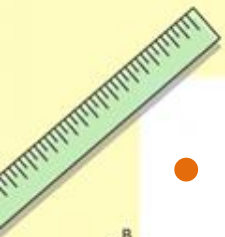
- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81





# Проверь себя!

- а) 6/35                      35/91                      18/85
- б) 15/44                    1/9                              8/45
- в) 22/63                    3/13                            14/75
- г) 24/95                    3/11                            10/21



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

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



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

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

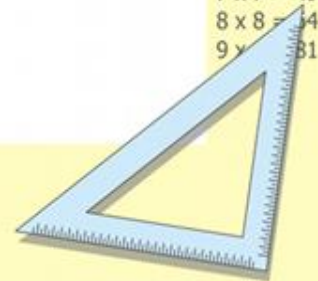
$$\sin 90^\circ = 1$$



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

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

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



# Домашнее задание

$$a) \frac{3}{8} \cdot \frac{9}{11} =$$

$$б) \frac{22}{35} \cdot \frac{21}{44} =$$

$$в) \frac{7}{9} \cdot \frac{2}{5} =$$

$$г) \frac{12}{13} \cdot \frac{26}{27} =$$

$$д) \frac{5}{9} \cdot \frac{4}{7} =$$

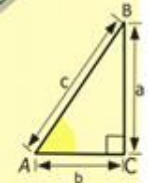
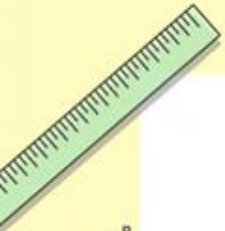
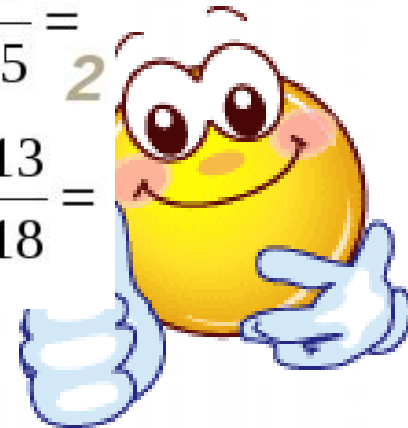
$$a) \frac{3}{7} \cdot \frac{2}{5} =$$

$$б) \frac{7}{13} \cdot \frac{39}{56} =$$

$$в) \frac{1}{9} \cdot \frac{1}{7} =$$

$$г) \frac{3}{8} \cdot \frac{4}{15} =$$

$$д) \frac{6}{7} \cdot \frac{13}{18} =$$



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



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

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

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

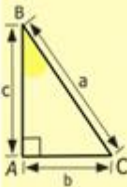
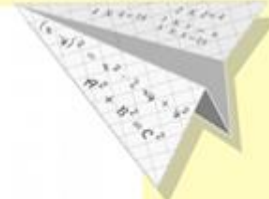


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

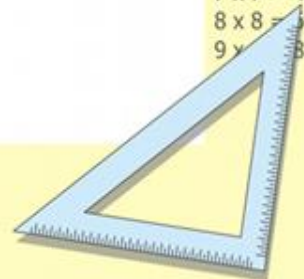
$$x = 70$$

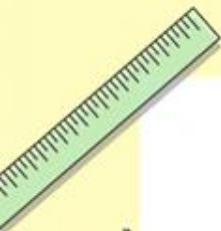
$$(x+y)(x-y) = x^2 - y^2$$



$$y = \cos$$

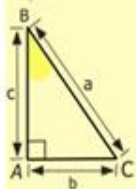
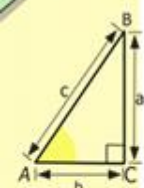
$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \\ 9 \times 9 = 81 \end{array}$$





Имеется 420 р. Израсходовали  $\frac{1}{3}$  этой суммы, а потом  $\frac{1}{4}$  остатка. Сколько рублей осталось?

На прошлой неделе Саша прочитал  $\frac{3}{7}$  всей книги, а на этой неделе — половину оставшихся страниц да ещё 20 страниц и дочитал книгу до конца. Сколько страниц в книге?



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 2100 \\ + 840 \\ \hline 105000 \end{array}$$

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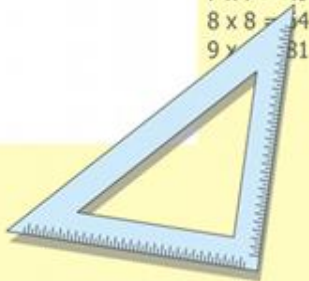
$$\sin 90^\circ = 1$$



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

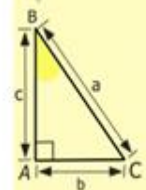
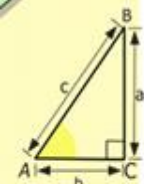
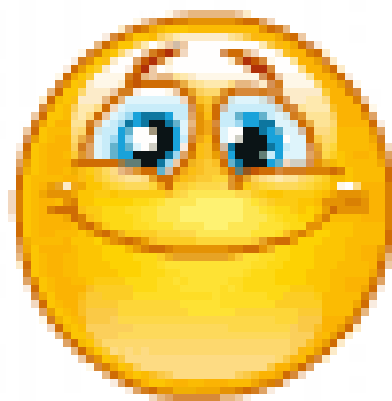
$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

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





# Спасибо вам за урок!



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

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