

Математик

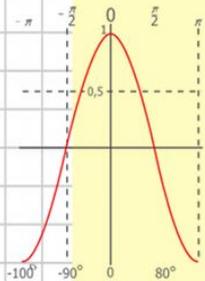
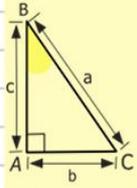
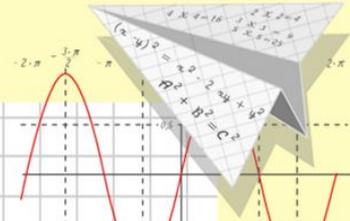
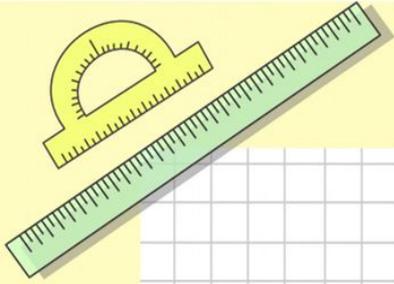
а

МАТЕМАТИЧЕСКАЯ ИГРА НА ПОНИМАНИЕ ТЕМЫ «ПЛОЩАДЬ И ПЕРИМЕТР ПРЯМОУГОЛЬНИКА»

Выполнила ученица 4 «а» класса
Филиппова Виктория

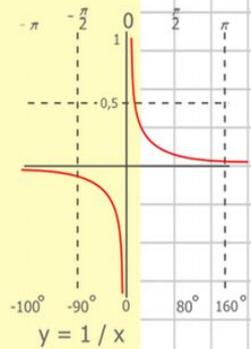
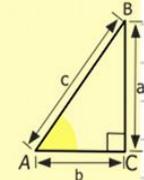
МБОУ «ПСОШ №3-ОЦ с УИОП»

Руководитель: Сыромятникова М.
А.



$y = \cos x$

- $2 \times 2 = 4$
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$$\begin{array}{r} 1 \\ \times 2500 \\ \hline 2500 \\ + 12500 \\ \hline 105000 \end{array}$$

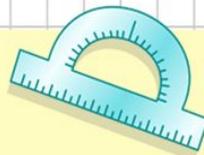


$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

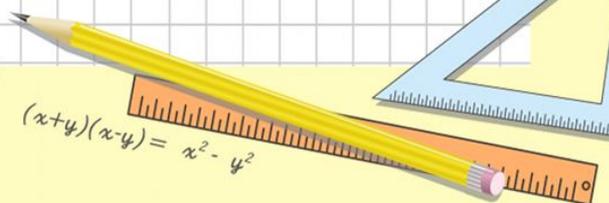
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$



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



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



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

Математическая игра по теме «Площадь и периметр прямоугольника»

Актуальность

Цель

Задачи

Объект

Гипотеза

Результат

Практика

Игра

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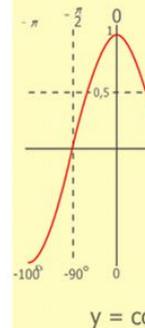
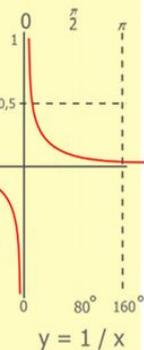
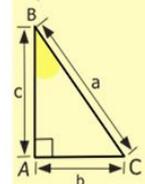
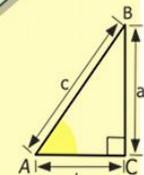
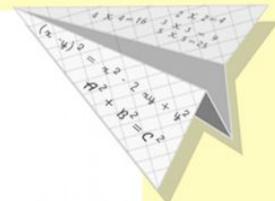
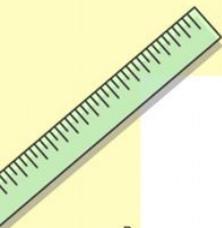
$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$x = 70$$

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

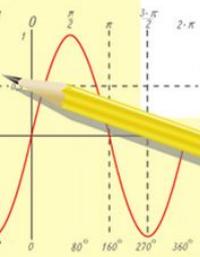
Актуальность проекта

Согласно статистике по данным ВПР четвероклассники испытывают трудности при решении задач с вычислением площади и периметра прямоугольника (квадрата).



$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 2100 \\ + 8400 \\ \hline 105000 \end{array}$$

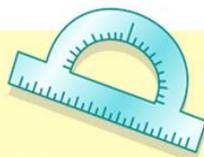
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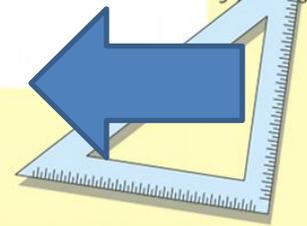
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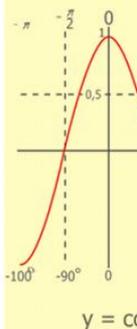
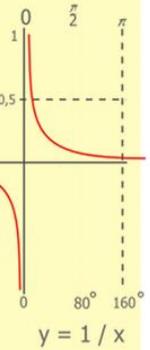
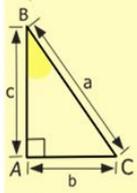
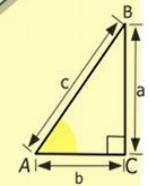
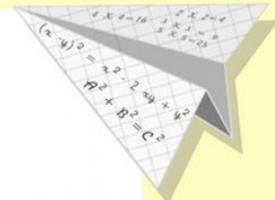
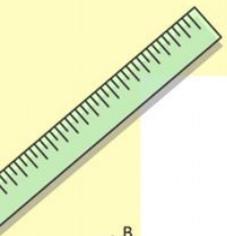
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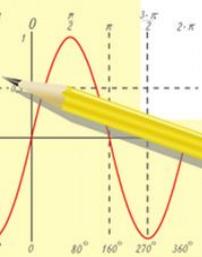


Объект исследования - нахождение площади и периметра прямоугольника



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

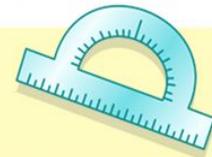
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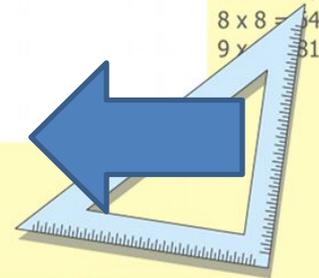
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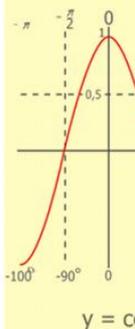
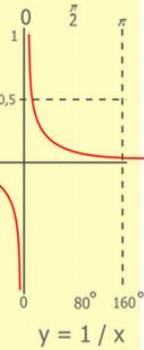
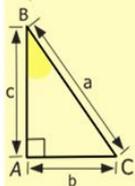
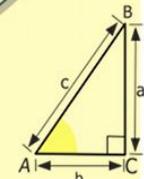
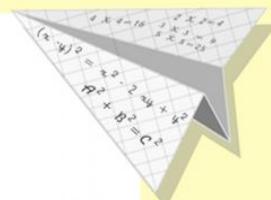
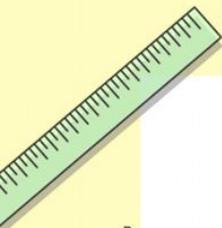
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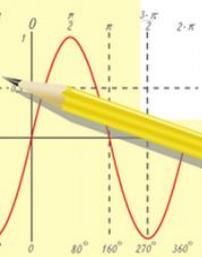
Цель:

Закрепить тему на нахождение площади и периметра прямоугольника



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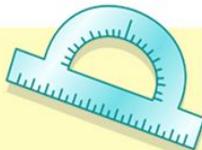
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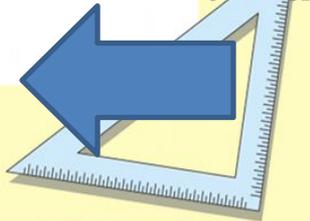
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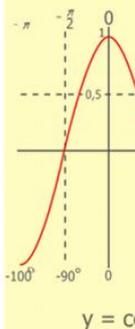
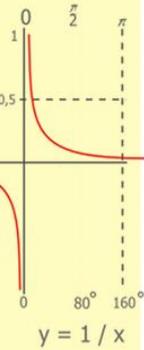
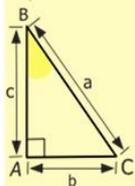
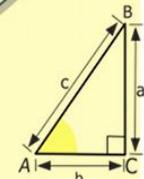
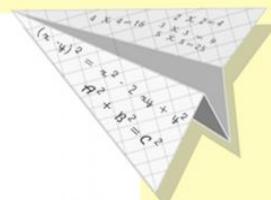
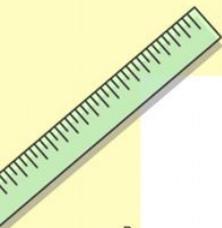
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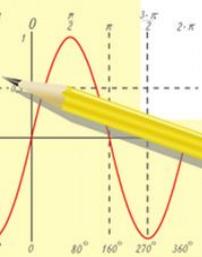
Задачи:

1. Подбор задач
2. Провести тестирование
3. Провести в классе игру
4. Провести контрольный тест



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

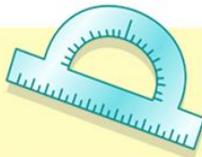
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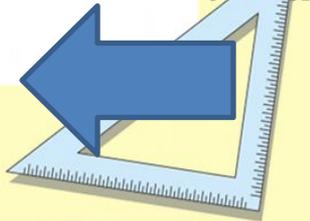
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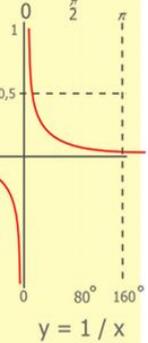
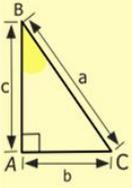
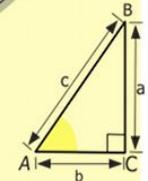
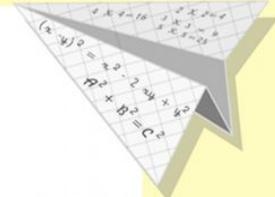
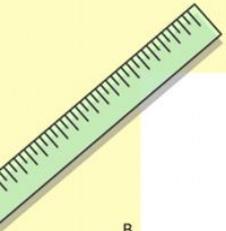
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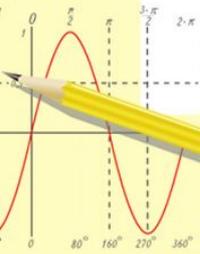
Гипотеза:

Если учащиеся усвоят тему на нахождения площади и периметра прямоугольника, то не испытают проблем при решении данного задания в ВПР



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

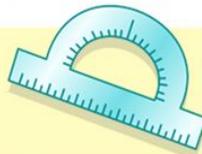
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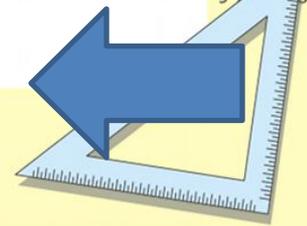
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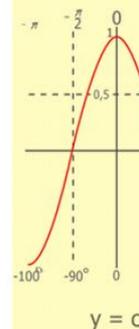
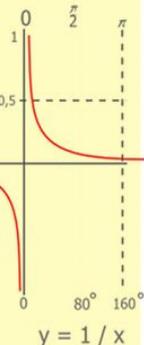
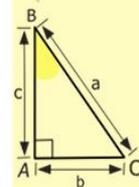
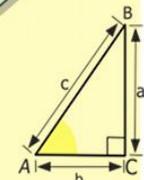
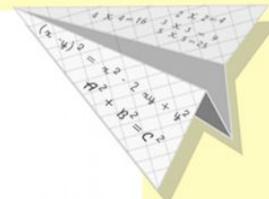
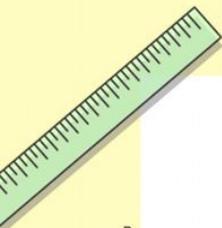
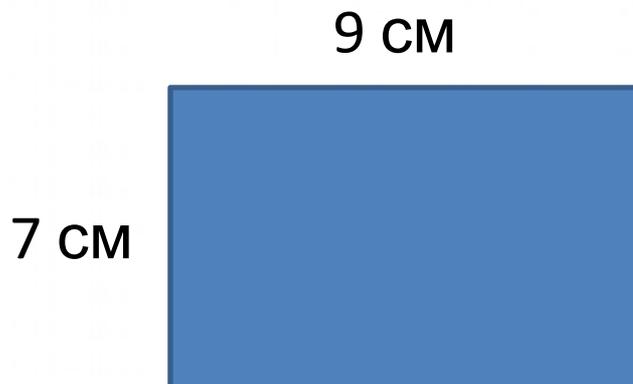
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Тестирование

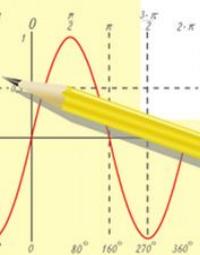
Состоит из 2 задач:

Найти периметр и площадь
прямоугольника.



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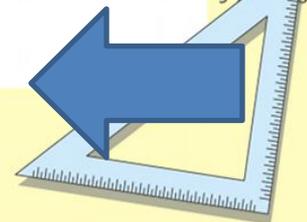
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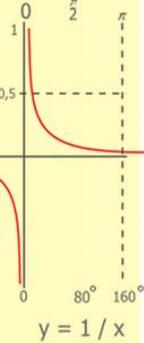
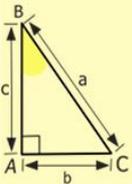
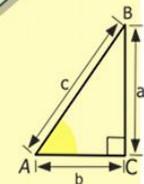
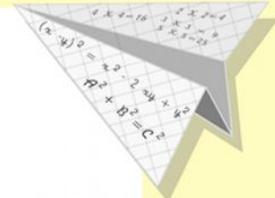
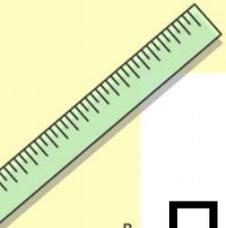
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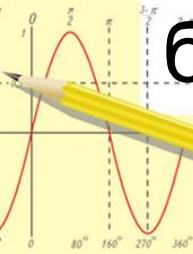
Игра

Первый игрок подбрасывает 2 раза кубик. 🎲 Используя выпавшие числа, он обозначает получившийся периметр прямоугольника или квадрата. В середине фигуры записывается его площадь или периметр. Игра заканчивается, когда больше не остаётся места для фигур. Выигрывает тот, кто занял больше места на листе бумаги.



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

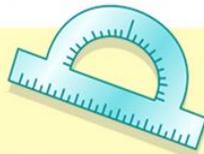
- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81



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

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

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

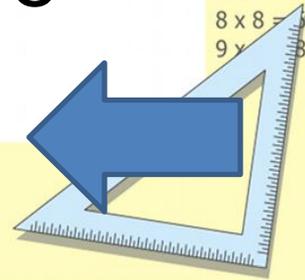


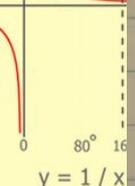
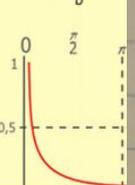
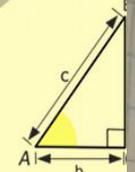
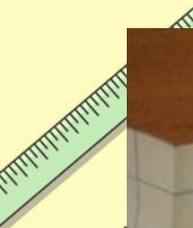
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

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

$$x = 70$$

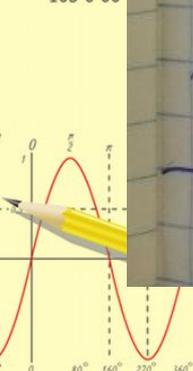




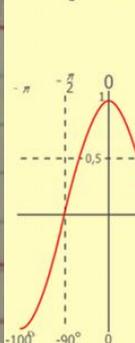
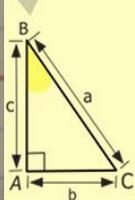
$$y = 1/x$$

$$\frac{1}{25} \times 42 = 210$$

$$+ 84 = 105.00$$



6	9	15	6	9	4	8	4	4
9	15	8	5	7	6	2	1	6
4	3	6	2	18	9	2	1	2
4	2	8	7	18	2	6	1	6
4	1	16	5	8	2	6	1	6
12	12	12	12	12	4	6	4	4
12	30	12	48	12	6	4	4	4
12	30	6	10	12	6	4	4	4



$$y = \cos$$

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

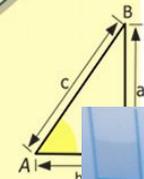
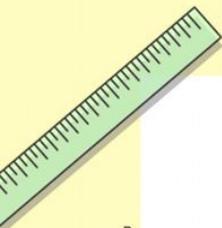
$$\sin 90$$

$$y = 1$$

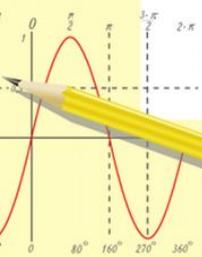
$$x = 25 + 45$$

$$x = 70$$

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



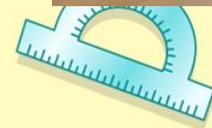
$$\begin{array}{r} 1 \\ \times 4 \\ \hline 21 \\ + 84 \\ \hline 105 \end{array}$$



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

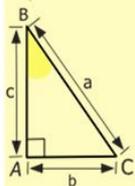
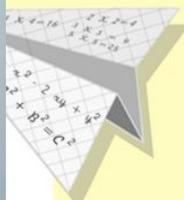
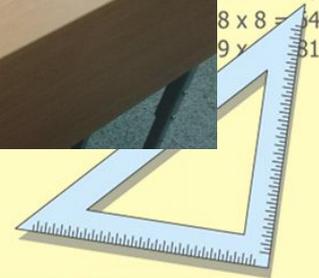
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

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



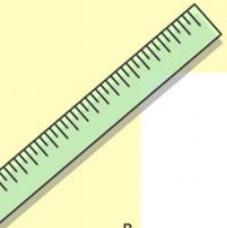
$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

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



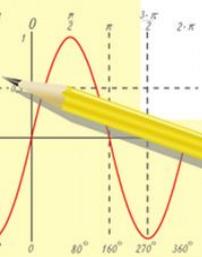
$$y = \cos$$

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y = cos

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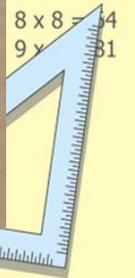
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$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

sin 90°

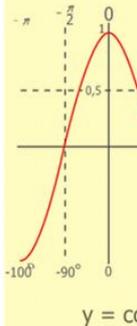
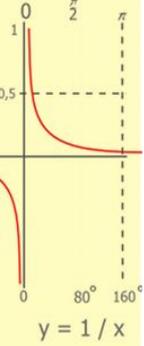
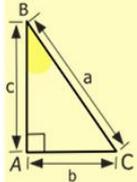
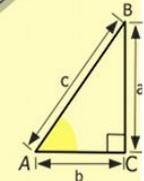
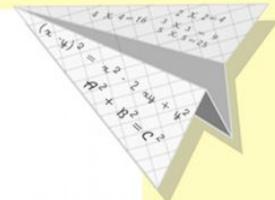
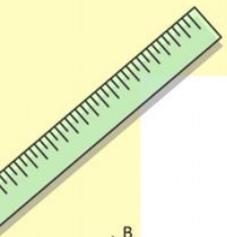
x = 70

x - y²



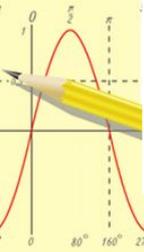
Результат

	Тест 1	Тест 2
Справилис ь	14	17
Не справилис ь	7	4
ВСЕГО	21	21



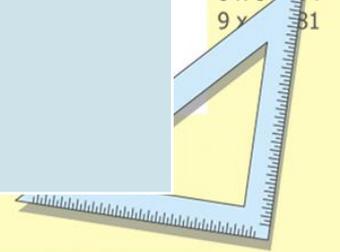
$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$

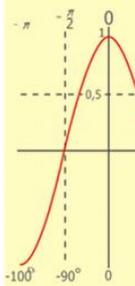
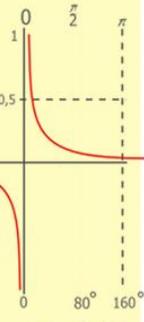
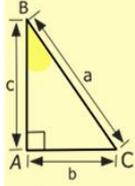
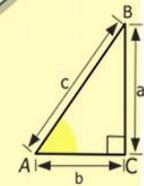
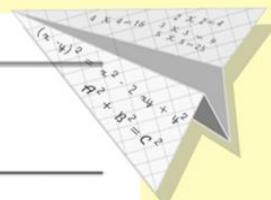
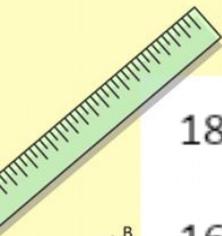
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$$\frac{x=20+40}{x=70}$$

$$x^2 - y^2$$



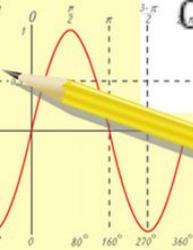


$$y = 1/x$$

$$y = \cos$$

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

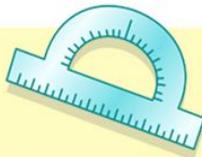
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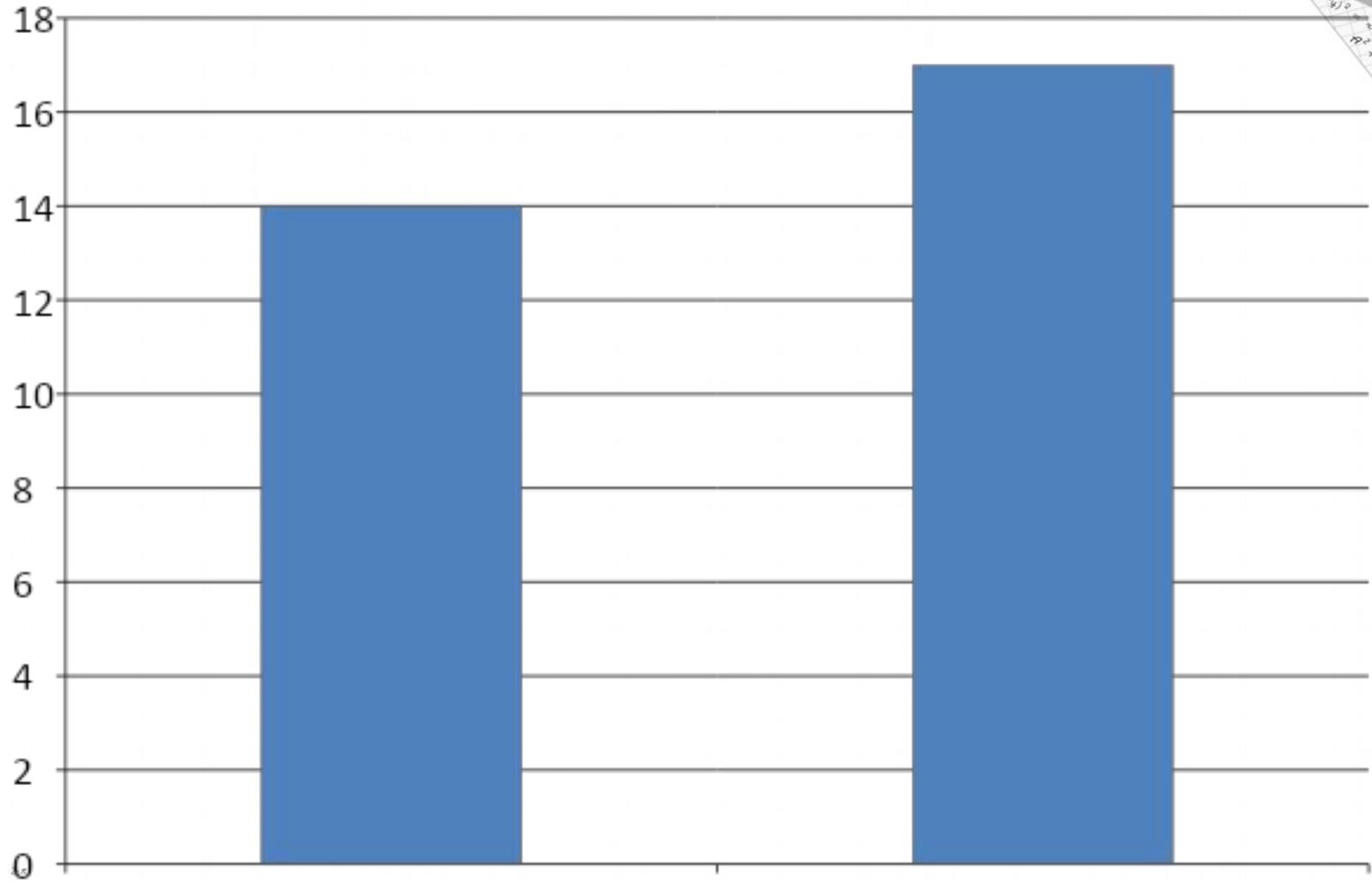
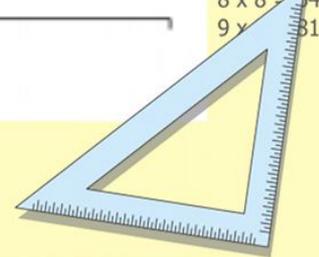
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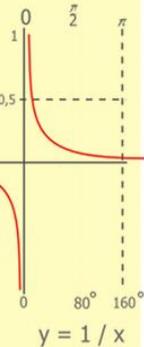
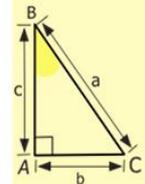
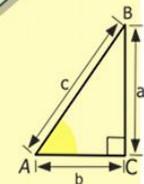
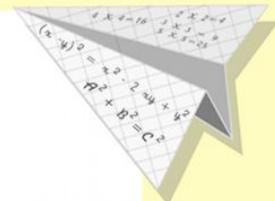
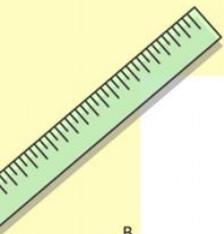


Tect 1

Tect 2

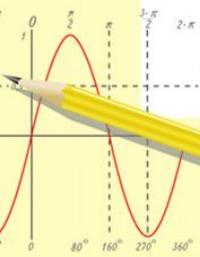
Вывод

В итоге нашего исследования подтвердилось, что данная игра способствует усвоению темы нахождение площади и периметра прямоугольника (квадрата).



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

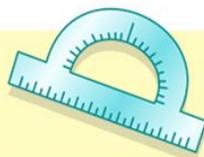
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