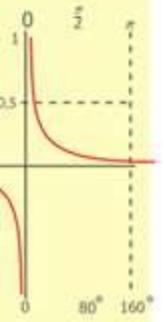
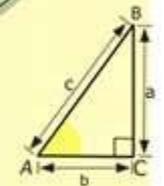
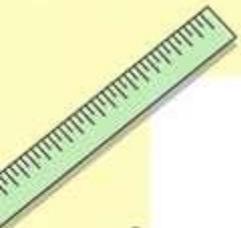
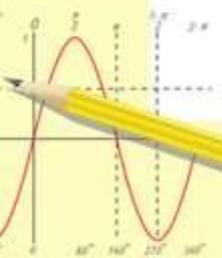


Квадратные уравнения



$$y = 1/x$$

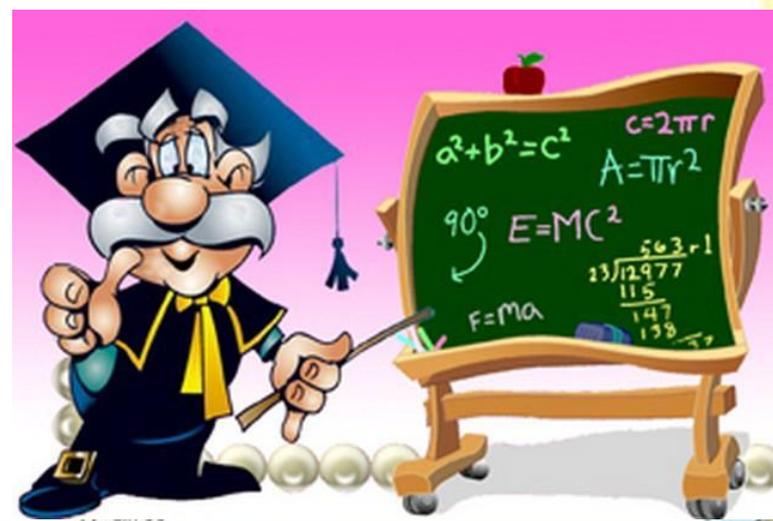
$$\begin{array}{r} \frac{1}{2} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$



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

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

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

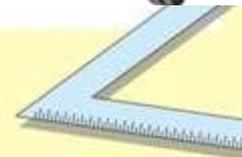


$$\begin{cases} x = 25y + 45 \\ y = 1 \end{cases}$$

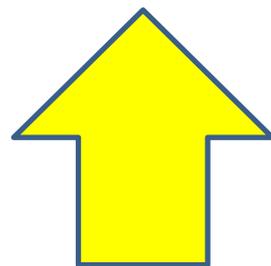
$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$x = 70$$

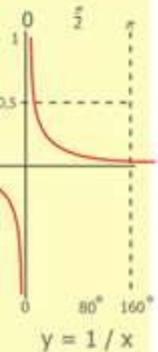
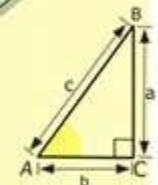
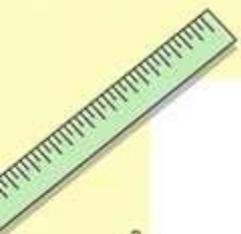
$$(x+y)(x-y) = x^2 - y^2$$



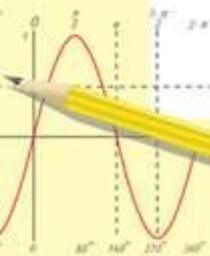
Квадратные уравнения



Линейные уравнения



$$\begin{array}{r} \frac{1}{2} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$



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

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

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

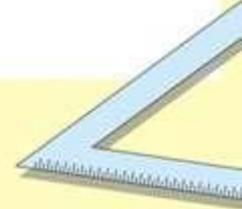


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

$$x = 70$$

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



Определение. Квадратным уравнением называется уравнение вида $ax^2 + bx + c = 0$, где x — переменная, a , b и c — некоторые числа, причём $a \neq 0$.

$$3x + 5 = 0$$

$$3x^2 + 5 = 0$$

$$3x^2 + 5x + 8 = 0$$

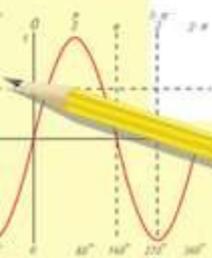
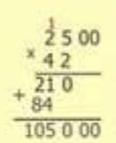
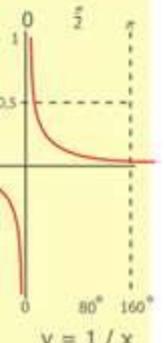
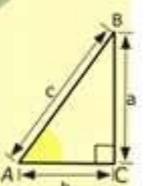
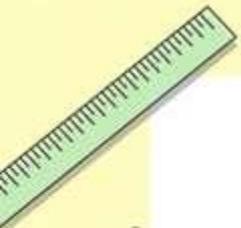
$$x^2 + 5 = 0$$

$$x^2 + 5x = 0$$

$$x + 5 = 0$$

$$3x^2 = 0$$

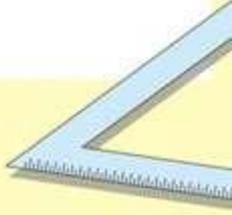
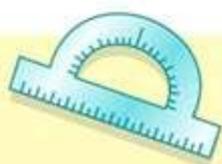
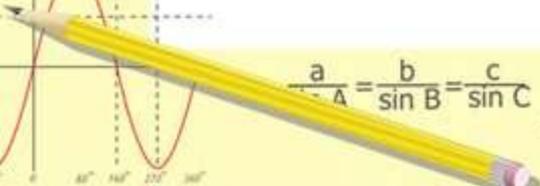
Выберите из данных уравнений квадратные. Определите в каждом значения a , b и c

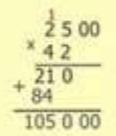
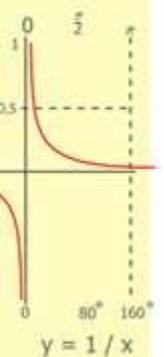
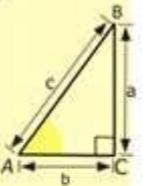
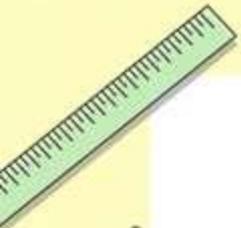

$$3x^2 + 5x + 8 = 0$$

3 – первый коэффициент

5 – второй коэффициент

8 – свободный член


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$
$$\sin 90^\circ = 1$$
$$(x+y)(x-y) = x^2 - y^2$$

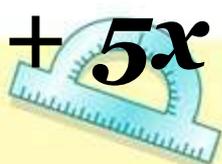
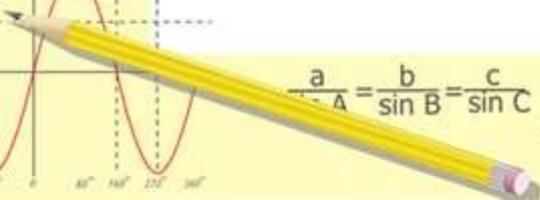

$$x^2 + bx + c = 0$$

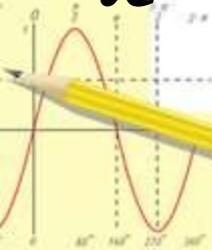
Если коэффициент при x^2 равен **единице**, то уравнение называют приведенным

**Приведите 3 примера
приведенных квадратных
уравнений**

$$x^2 + 5x + 8 = 0$$

$$x^2 + 8 = 0$$

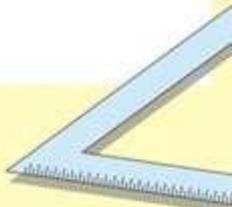

$$x^2 + 5x = 0$$

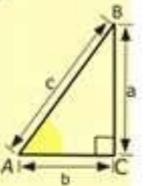
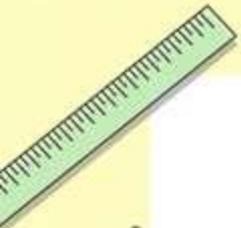

$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

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

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

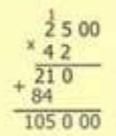
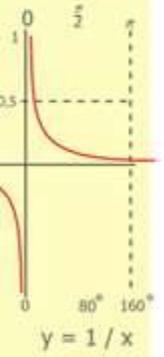
$$\begin{cases} y = \sin 90 \\ y = 1 \\ x = 25 + 45 \\ x = 70 \end{cases}$$

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


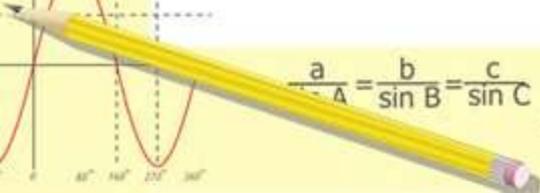

$$x^2 + bx + c = 0$$

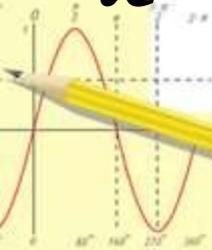
Если коэффициент b или c отсутствует, то уравнение называют неполным

Приведите 3 примера неполных квадратных уравнений


$$x^2 + 5x + 8 = 0$$

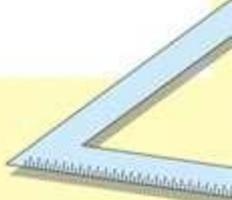
$$x^2 + 8 = 0$$

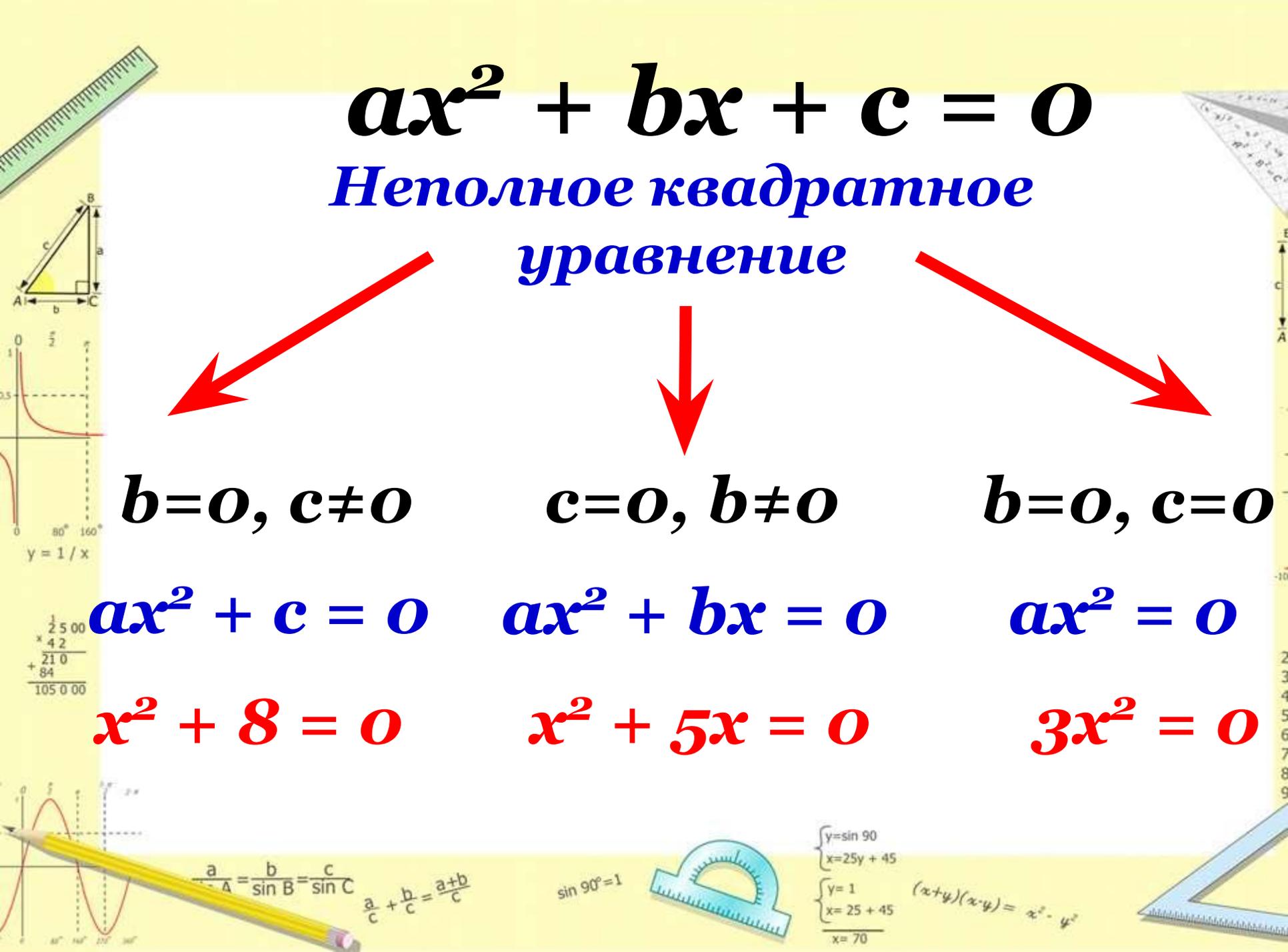

$$x^2 + 5x = 0$$


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

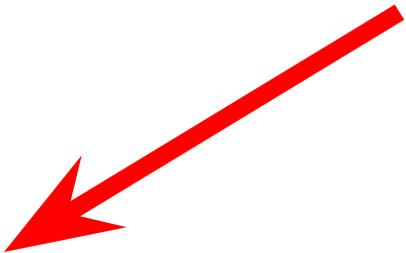
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

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

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



$$ax^2 + bx + c = 0$$

Неполное квадратное уравнение


$$b=0, c \neq 0$$

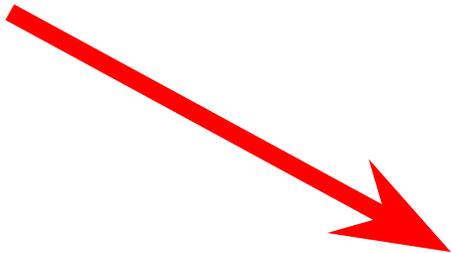
$$ax^2 + c = 0$$

$$x^2 + 8 = 0$$


$$c=0, b \neq 0$$

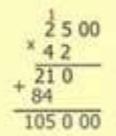
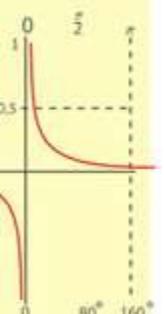
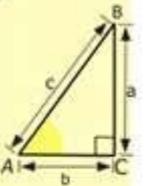
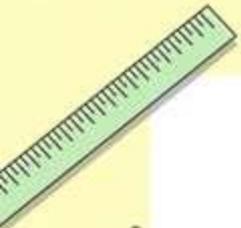
$$ax^2 + bx = 0$$

$$x^2 + 5x = 0$$


$$b=0, c=0$$

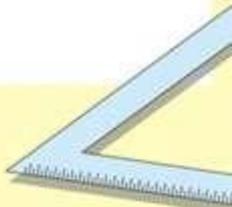
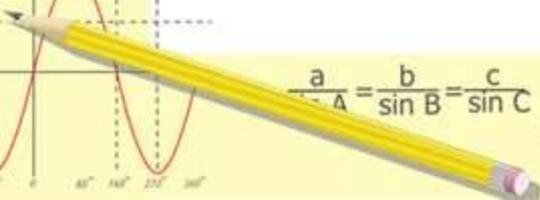
$$ax^2 = 0$$

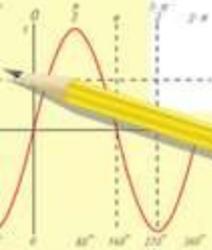
$$3x^2 = 0$$



Упражнения из учебника
№ 512, 513, 514,
515 (1 строка), 517 (1 строка)

Домашнее задание
п. 21, №515 (2 строка),
517 (2 строка)




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

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

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

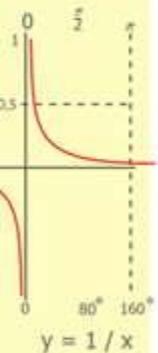
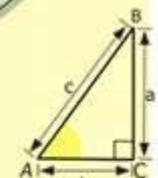
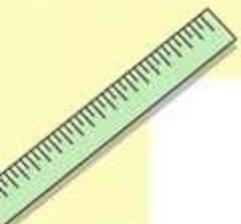
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

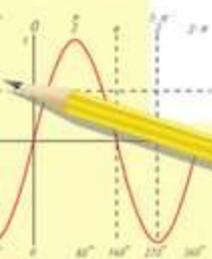
$$x = 70$$

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

**Учебник Алгебра 8 класс Ю.
Н. Макарычев, Н.Г. Миндюк,
К.И. Нешков, С.Б. Суворова
(2013 год)**



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



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

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

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



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

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

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

