Блок-схема для решения квадратных неравенств

Данная презентация содержит блок-схему для решения квадратных неравенств и тренажер для проверки усвоенного материала.

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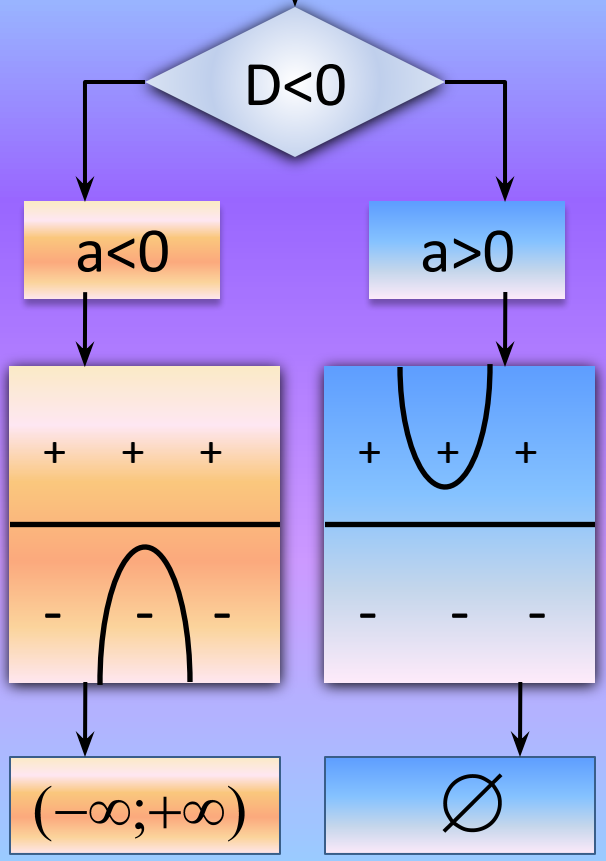
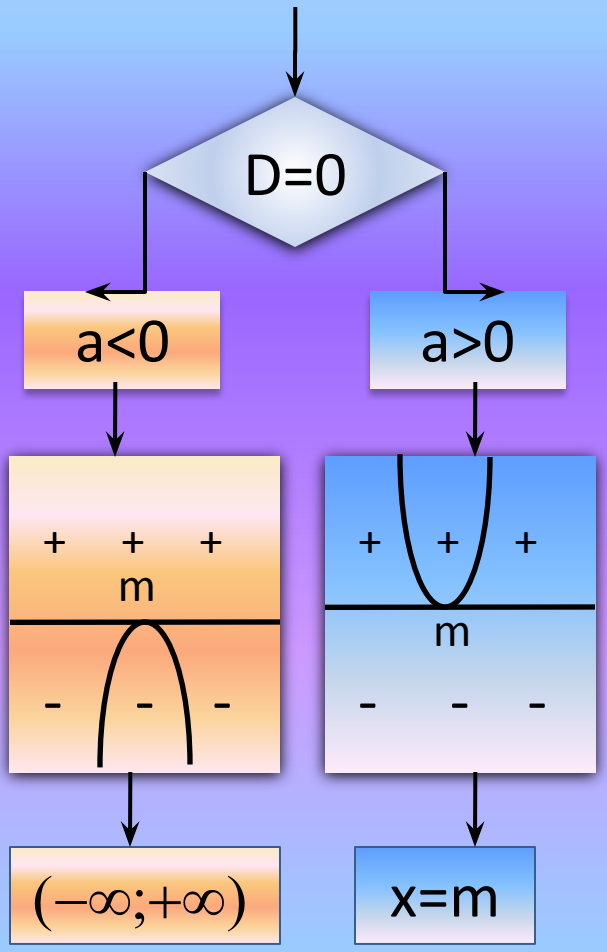
678108

Неравенства второй степени вида $ax^2 + bx + c \leq 0$

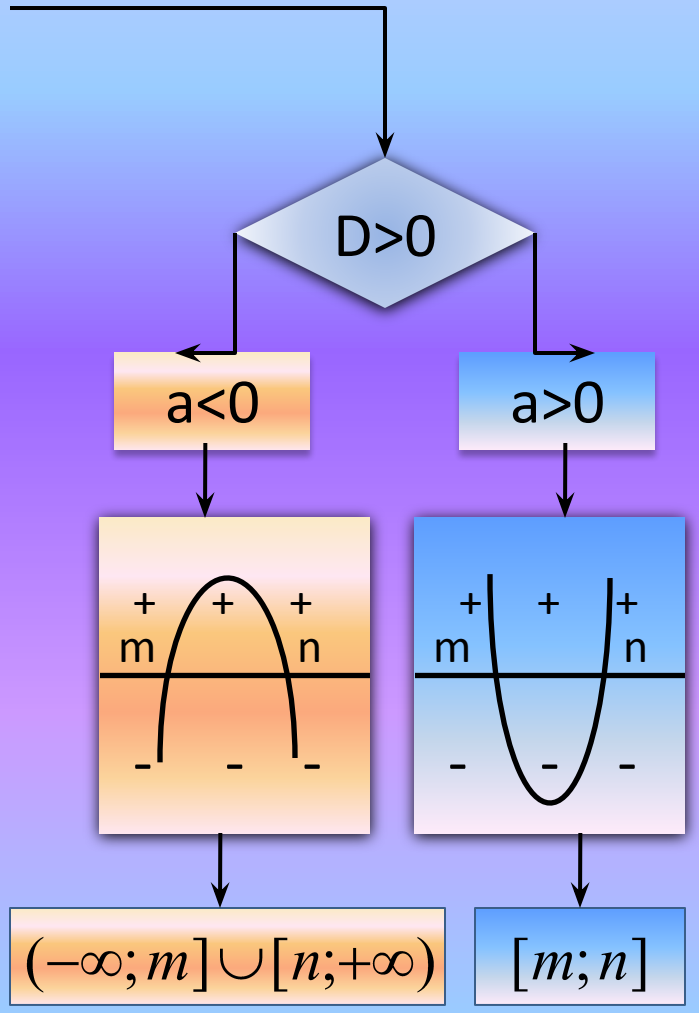
$$ax^2 + bx + c \leq 0$$



$$ax^2 + bx + c \leq 0$$



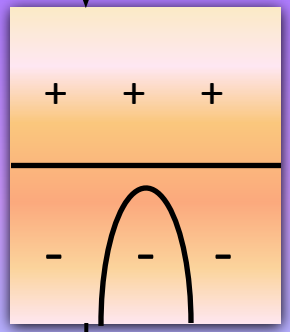
$$ax^2 + bx + c \le 0$$



$$ax^2 + bx + c \le 0$$

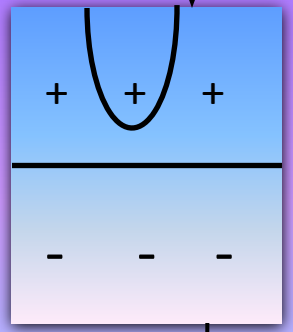
D<0

a<0



$(-\infty;+\infty)$

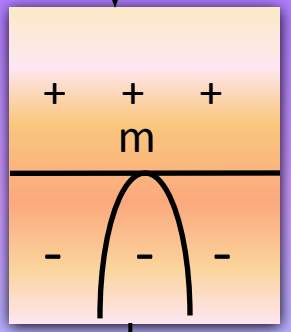
a>0



$\varnothing$

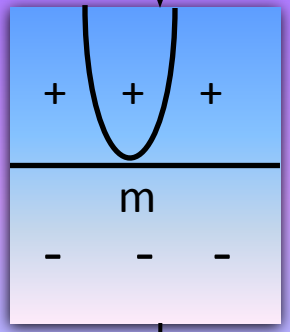
D=0

a<0



$(-\infty;+\infty)$

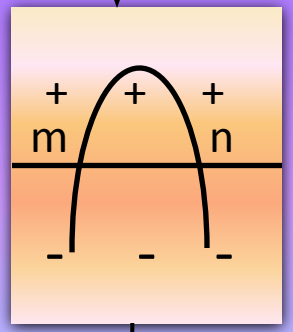
a>0



x=m

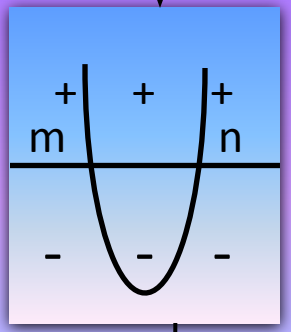
D>0

a<0



$(-\infty;m]\cup[n;+\infty)$

a>0



$[m;n]$

Неравенства второй степени вида $ax^2 + bx + c \geq 0$

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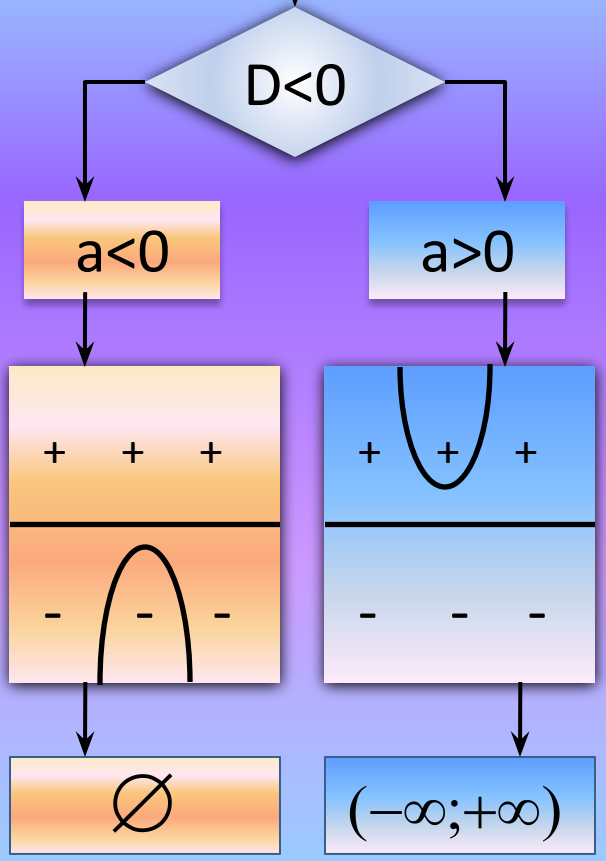
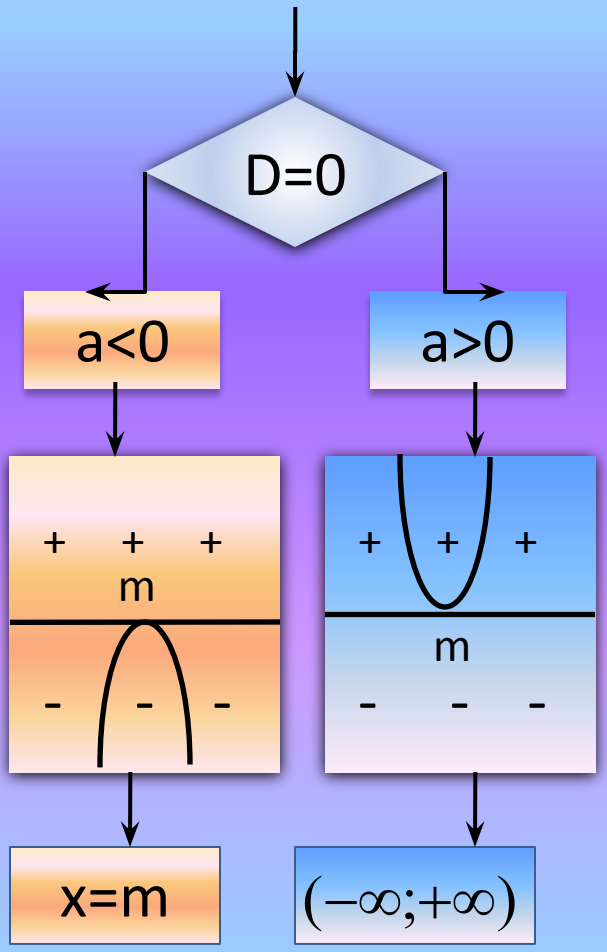
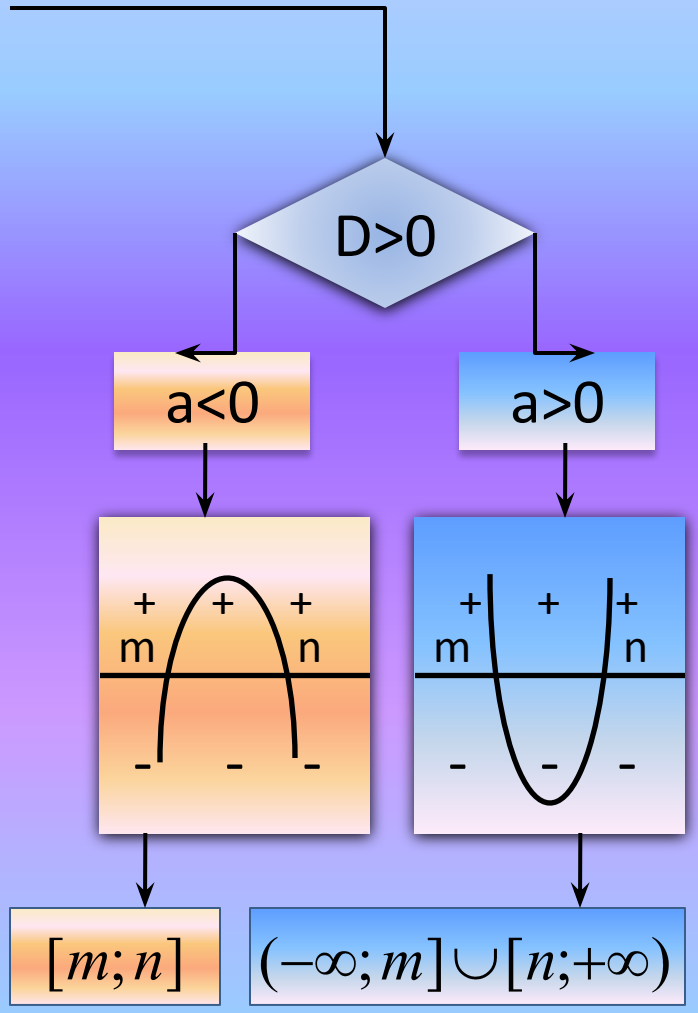


$$ax^2 + bx + c \geq 0$$



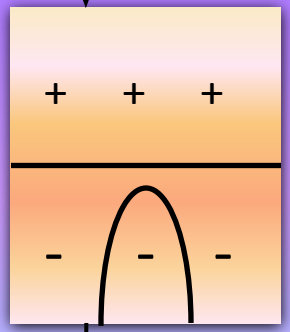
$$ax^2 + bx + c \geq 0$$



$$ax^2 + bx + c \geq 0$$

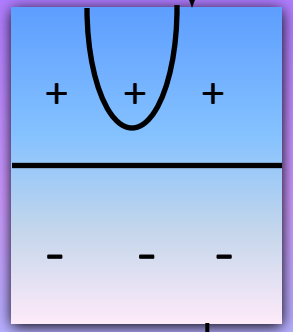
D<0

a<0



$\varnothing$

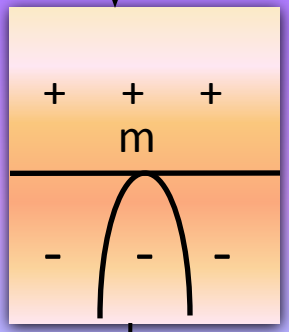
a>0



$(-\infty;+\infty)$

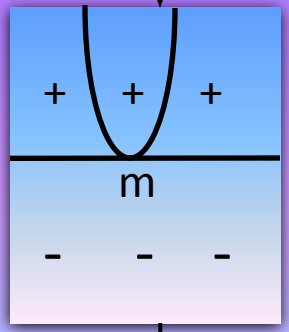
D=0

a<0



x=m

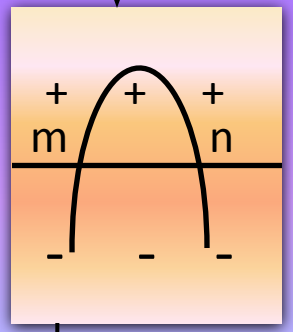
a>0



$(-\infty;+\infty)$

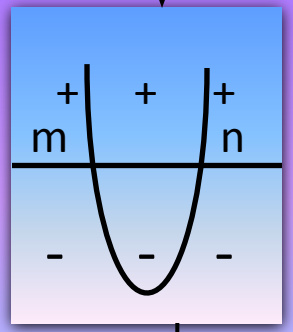
D>0

a<0



$[m;n]$

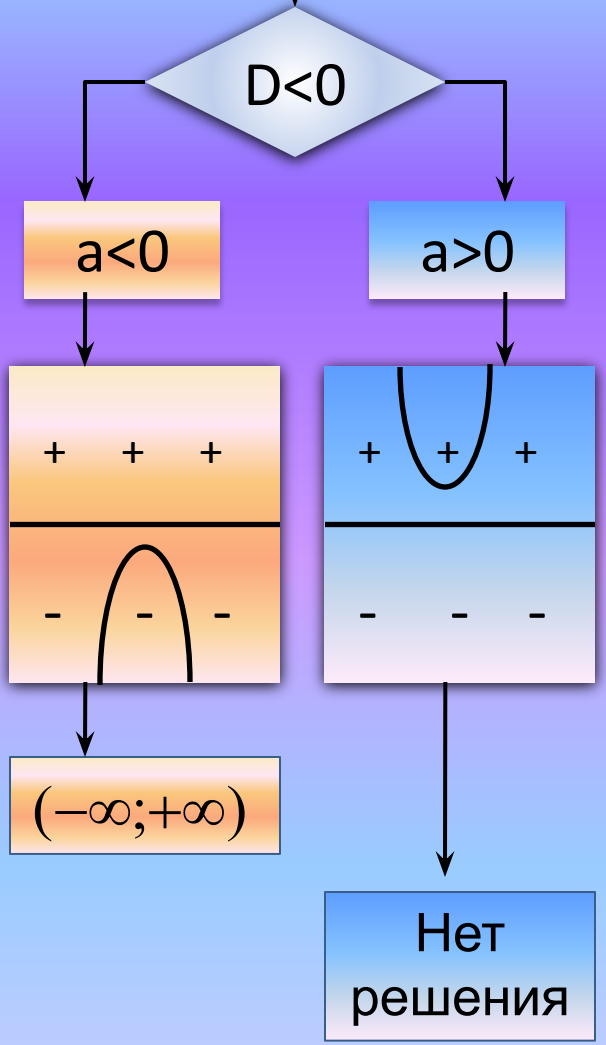
a>0



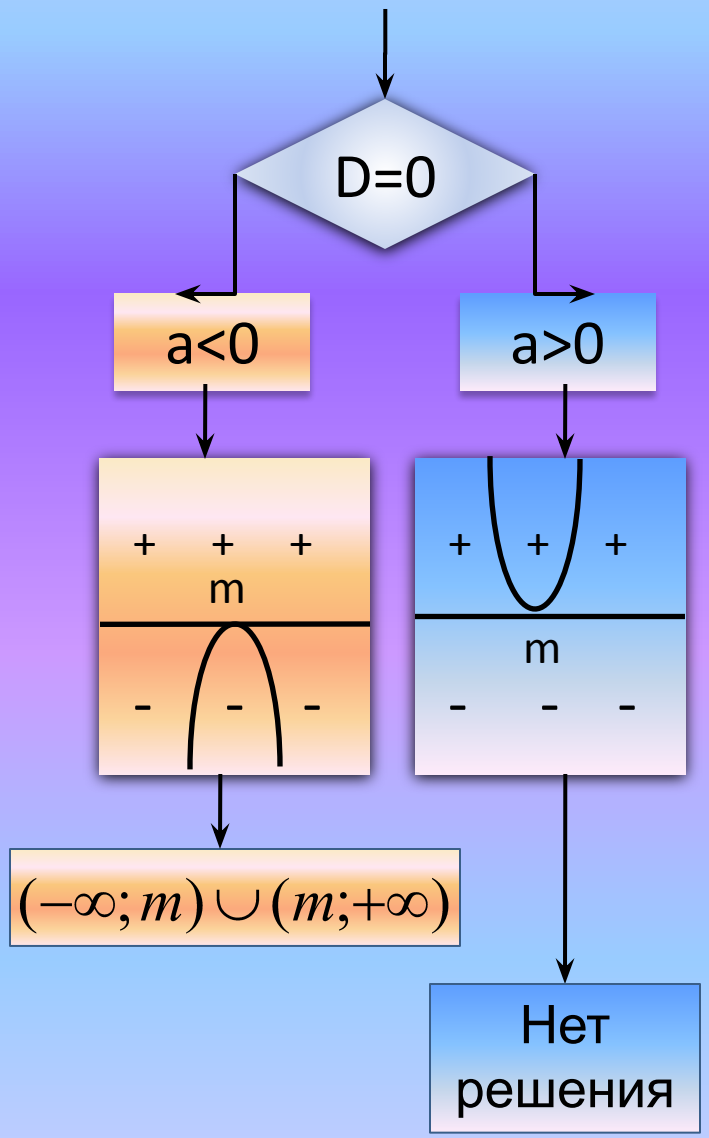
$(-\infty;m]\cup[n;+\infty)$

Неравенства второй степени вида $ax^2 + bx + c < 0$

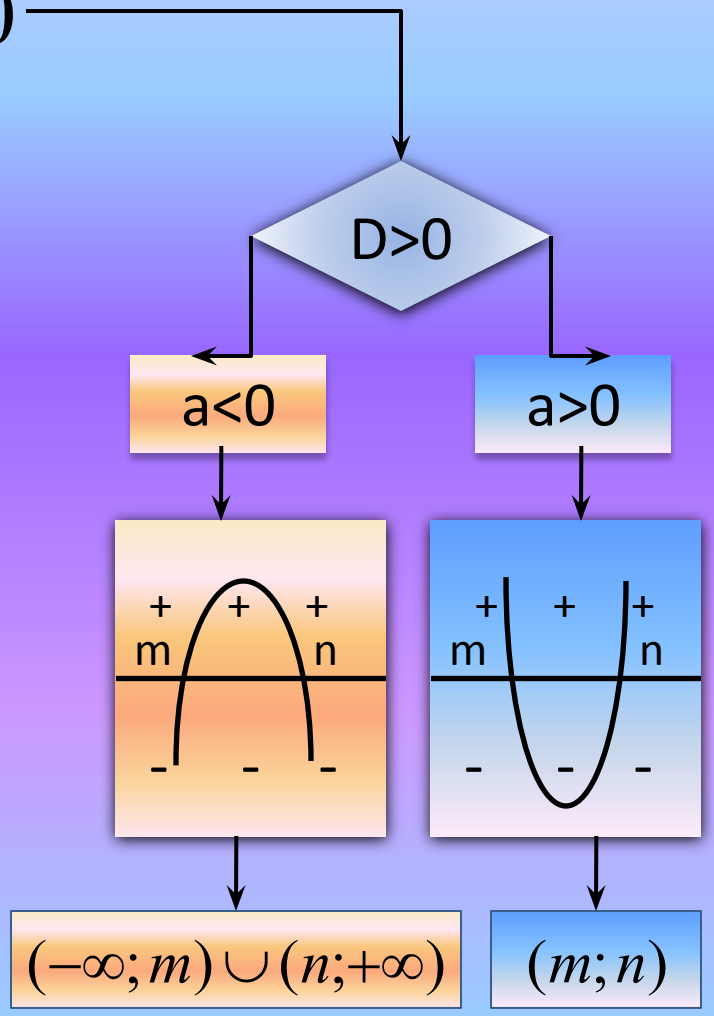
$$ax^2 + bx + c < 0$$



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



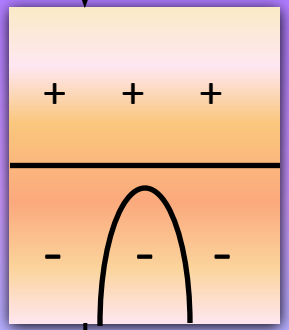
$$ax^2 + bx + c < 0$$



$ax^2 + bx + c < 0$

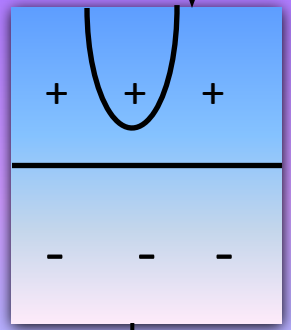
D<0

a<0



$(-\infty;+\infty)$

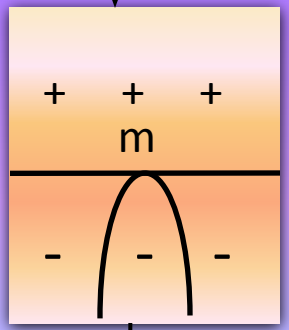
a>0



Нет решения

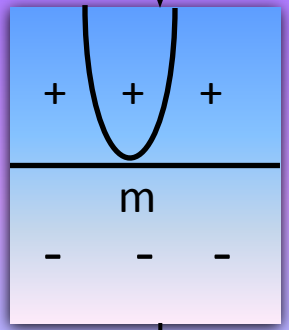
D=0

a<0



$(-\infty;m)\cup(m;+\infty)$

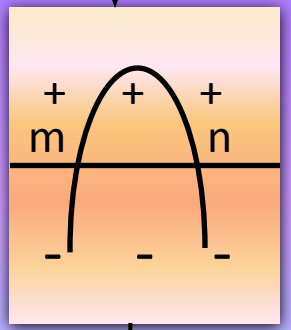
a>0



Нет решения

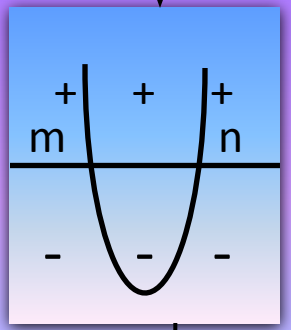
D>0

a<0



$(-\infty;m)\cup(n;+\infty)$

a>0



$(m;n)$

Неравенства второй степени вида $ax^2 + bx + c > 0$

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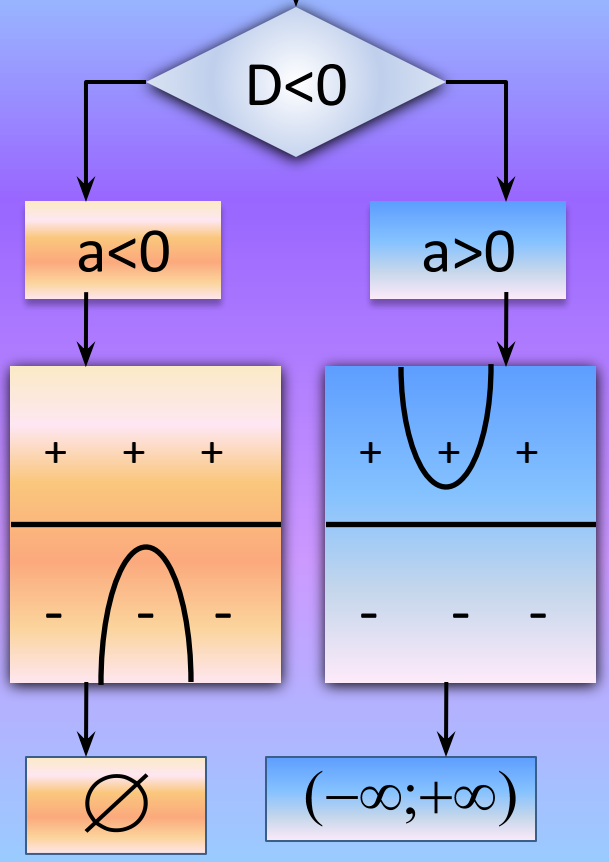
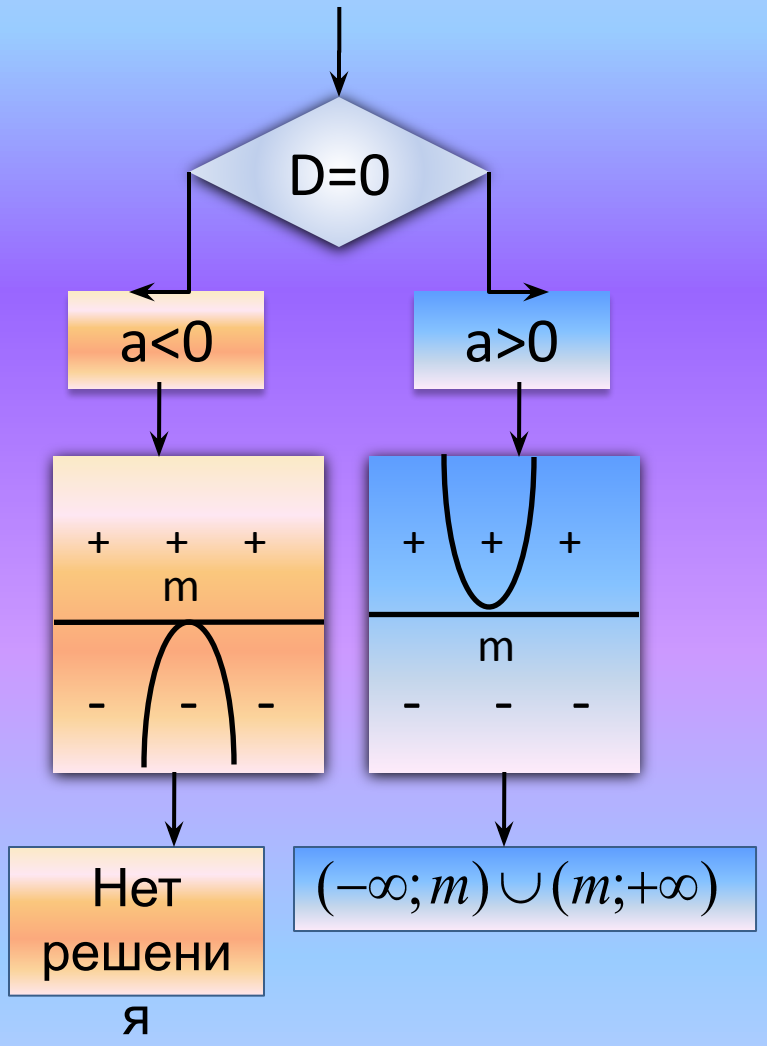
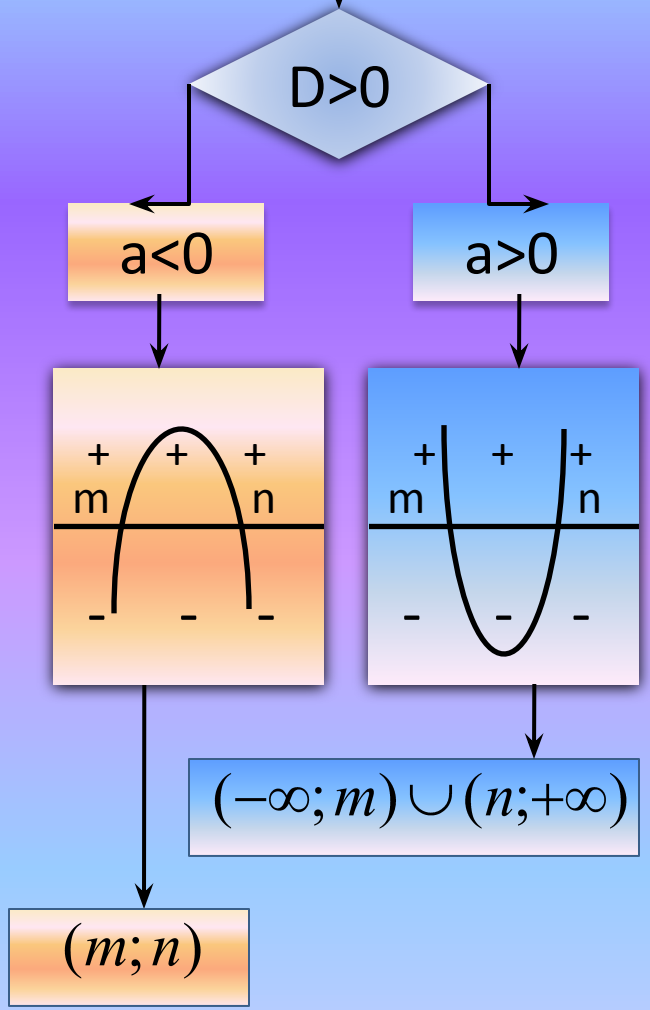


$$ax^2 + bx + c > 0$$



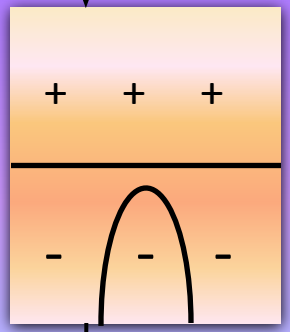
$$ax^2 + bx + c > 0$$



$ax^2 + bx + c > 0$

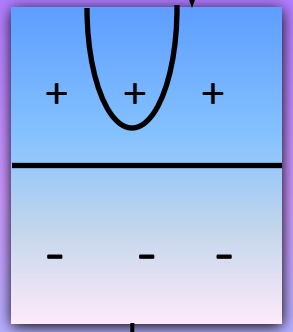
D<0

a<0



$\varnothing$

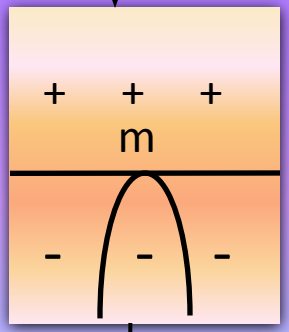
a>0



$(-\infty;+\infty)$

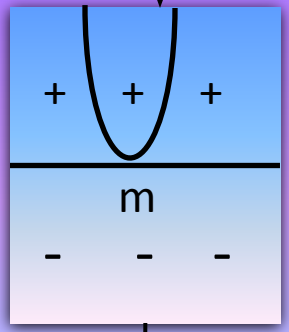
D=0

a<0



Нет решения

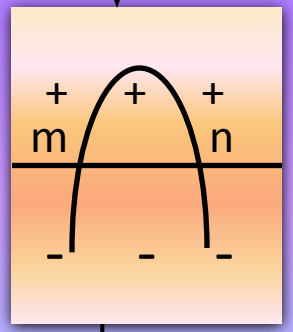
a>0



$(-\infty;m)\cup(m;+\infty)$

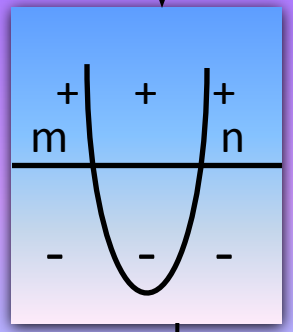
D>0

a<0



$(m;n)$

a>0



$(-\infty;m)\cup(n;+\infty)$

Тренажер

решение квадратных неравенств

Варианты с заданиями

Ответы

1 Вариант

1. $x^2 + 3x + 4 > 0$
2. $-x^2 + 10x - 16 > 0$
3. $x^2 + 3x \leq 0$
4. $4x - x^2 \geq 0$
5. $x^2 - 9 < 0$
6. $3x^2 - 7x - 6 \leq 0$
7. $-2x^2 + 4x + 6 \leq 0$
8. $25 \geq x^2$
9. $2x^2 - 3x - 2 > 0$
10. $9x^2 - 12x + 4 < 0$

2 Вариант

1. $-x^2 + 3x - 2 < 0$
2. $3x^2 - 2x - 1 \geq 0$
3. $-x^2 + x - 6 < 0$
4. $x^2 - 49 \geq 0$
5. $5x - x^2 < 0$
6. $x^2 + 8x > 0$
7. $2x^2 - x - 3 \leq 0$
8. $-2x^2 + 8x - 6 > 0$
9. $4x^2 + 4x + 1 \leq 0$
10. $5x^2 - 8x - 4 > 0$

3 Вариант

1. $x^2 + 4x - 5 \leq 0$
2. $x^2 + 3x + 2 < 0$
3. $x^2 - 8x > 0$
4. $5x - x^2 \geq 0$
5. $x^2 - 81 \leq 0$
6. $-x^2 + 7x + 8 > 0$
7. $-x^2 - x + 12 \leq 0$
8. $-3x^2 + 5x - 3 \geq 0$
9. $9x^2 - 6x + 1 > 0$
10. $25x^2 + 20x + 4 < 0$

4 вариант

1. $-x^2 + 3x + 4 > 0$
2. $x^2 - 0{,}49 \geq 0$
3. $2x^2 \leq 8$
4. $3x + x^2 \leq 0$
5. $2x^2 - 6x < 0$
6. $4x^2 + 8x - 5 > 0$
7. $-2x^2 - 5x + 3 \leq 0$
8. $x^2 + 7x + 15 \leq 0$
9. $9x^2 - 24x + 16 \geq 0$
10. $4x^2 + 12x + 9 \leq 0$

1 Вариант

1. $(-\infty; +\infty)$
2. $(2; 8)$
3. $[-3; 0]$
4. $[0; 4]$
5. $(-3; 3)$
6. $\left[-\frac{2}{3}; 3\right]$
7. $(-\infty; -1] \cup [3; +\infty)$
8. $[-5; 5]$
9. $\left(-\infty; -\frac{1}{2}\right) \cup (2; +\infty)$
10. нет решения $(\emptyset)$

2 Вариант

1. $(-\infty; -1) \cup (2; +\infty)$
2. $\left(-\infty; -\frac{1}{3}\right] \cup [1; +\infty)$
3. $(-\infty; +\infty)$
4. $(-\infty; -7] \cup [7; +\infty)$
5. $(-\infty; 0) \cup (5; +\infty)$
6. $(-\infty; -8) \cup (0; +\infty)$
7. $[-1; 1{,}5]$
8. $(1; 3)$
9. $x = -\frac{1}{2}$
10. $(-\infty; -0{,}4) \cup (2; +\infty)$

3 Вариант

1. $[-5; 1]$
2. $(-2; -1)$
3. $(-\infty; 0) \cup (8; +\infty)$
4. $[0; 5]$
5. $[-9; 9]$
6. $(-1; 8)$
7. $(-\infty; -4] \cup [3; +\infty)$
8. $\emptyset$
9. $\left(-\infty; \frac{1}{3}\right) \cup \left(\frac{1}{3}; +\infty\right)$
10. $\emptyset$

4 вариант

1. $(-1; 4)$
2. $(-\infty; -0{,}7] \cup [0{,}7; +\infty)$
3. $[-2; 2]$
4. $[-3; 0]$
5. $(0; 3)$
6. $(-\infty; -2{,}5) \cup (0{,}5; +\infty)$
7. $(-\infty; -3] \cup [0{,}5; +\infty)$
8. $\emptyset$
9. $(-\infty; +\infty)$
10. $x = -1{,}5$