

## ФСУ. Тренажер.

### Разложите на множители:

1.	$a^2-b^2, x^2-b^2, a^2-y^2, x^2-y^2, c^2-b^2, a^2-c^2, m^2-b^2, n^2-b^2, m^2-n^2, r^2-d^2, s^2-k^2, a^2-4, 9-b^2, a^2-16, 25-y^2, 36-b^2, a^2-49, 121-b^2, n^2-81, 64-n^2, r^2-144, 169-k^2, 225-b^2, a^2-196, 256-y^2, 3600-b^2, a^2-4900, 12100-b^2, 289-y^2;$
2.	$(a-2x)^2-b^2, (3a-y)^2-b^2, b^2-(a+3b)^2, (2a-c)^2-a^2, (4a+r)^2-a^2, a^2-(a-4s)^2, x^2-(5a-k)^2, (a+5t)^2-x^2, (a+2x)^2-c^2, (3a-b)^2-k^2, b^2-(a+7b)^2, (9a-c)^2-k^2, (4a+r)^2-a^2, a^2-(a-4s)^2, x^2-(25a+k)^2, (3a+15t)^2-x^2, (3a-5b)^2-x^2;$
3.	$a^2-2ab+b^2, x^2-2xb+b^2, a^2-2ay+y^2, x^2-2xy+y^2, c^2-2cb+b^2, a^2-2ac+c^2, m^2+2mb+b^2, n^2+2nb+b^2, m^2+2mn+n^2, r^2+2rd+d^2, s^2+2sk+k^2, x^2+2xb+b^2, a^2-4a+4, 9-6b+b^2, a^2-8a+16, 25-10y+y^2, 36-12b+b^2, a^2-14a+49, 121-22b+b^2, n^2-18n+81, 64-16n+n^2, r^2-24r+144, 169+26k+k^2, 225-30b+b^2, a^2-28a+196, 256-32y+y^2, 3600+120b+b^2, a^2-140a+4900, 289+34y+y^2;$
4.	$a^3-b^3, x^3-b^3, a^3+y^3, x^3-y^3, c^3+b^3, a^3+c^3, m^3-b^3, n^3-b^3, m^3-n^3, r^3+d^3, a^3-27b^3, 0,027x^3+b^3, 8a^3-y^3, x^3+0,008y^3, c^3-0,125b^3, 64a^3+c^3, 125m^3-b^3, n^3-0,064b^3, 8m^3+27n^3, 27r^3-125d^3, 1-b^3, x^3-1, 8+y^3, 27-b^3, x^3-64, 1+y^3;$
5.	$a^3-3a^2b+3b^2a-b^3, x^3-3x^2b+3b^2x-b^3, a^3+3a^2y+3y^2a+y^3, x^3-3x^2y+3y^2x-y^3, c^3-3c^2b+3b^2c-b^3, x^3-3x^2c+3c^2x-c^3, r^3+3r^2y+3y^2r+y^3, m^3-3m^2n+3n^2m-n^3, 1-3b+3b^2-b^3, x^3+3x^2+3x+1, 1+3y+3y^2+y^3, x^3-6x^2+12x-8, a^3+6a^2+12a+8, c^3+6c^2+12c+8, m^3-6m^2+12m-8, 27+27c+9c^2+c^3, 27-27m+9m^2-m^3,$
6.	<i>Представте их в виде квадрата двучлена (если это возможно)</i> $a^2+ab+b^2, a^2-8a+16, a^2-4a+4, y^2-yx+x^2, a^2+a+1, y^2-y+1, 9-6b+b^2, 4+2b+b^2, y^2-2y+4, a^2+3b+9, 25-10y+y^2, 36-12b+b^2, a^2-14a+49, 16-4x+x^2, a^2+5b+25, y^2-2yx+4x^2, 64-16n+n^2, r^2-24r+144, 25a^2+5ab+b^2, 169+26k+k^2, 225-30b+b^2, y^2-7yx+49x^2, 121a^2+11ab+b^2, y^2-15yx+225x^2, a^2-28a+196$

### Решите уравнения:

1. $a^2-0,04=0,$	1. $a^2-4a+4=0,$	1. $1-3b+3b^2-b^3=0,$
2. $9-b^2=0,$	2. $9-6b+b^2=0,$	2. $x^3+3x^2+3x+1=0$
3. $a^2-0,16=0,$	3. $a^2-8a+16=0,$	3. $1+3y+3y^2+y^3=0,$
4. $25-y^2=0,$	4. $25-10y+y^2=0,$	4. $x^3-6x^2+12x-8=0,$
5. $0,36-b^2=0,$	5. $36-12b+b^2=0,$	5. $a^3+6a^2+12a+8=0,$
6. $a^2-49=0,$	6. $a^2-14a+49=0,$	6. $c^3+6c^2+12c+8=0,$
7. $1,21-b^2=0,$	7. $121-22b+b^2=0,$	7. $m^3-6m^2+12m-8=0,$
8. $n^2-81=0,$	8. $n^2-18n+81=0,$	8. $27+27c+9c^2+c^3=0,$
9. $64-n^2=0$	9. $0,64-1,6n+n^2=0,$	9. $27-27m+9m^2-m^3=0.$
10. $r^2-1,44=0,$	10. $r^2-24r+144=0,$	
11. $1,69-k^2=0,$	11. $1,69+2,6k+k^2=0,$	
12. $2,25-b^2=0,$	12. $2,25-3b+b^2=0,$	
13. $a^2-1,96=0,$	13. $1,21a^2+2,2ab+b^2=0,$	
14. $256-y^2=0,$	14. $y^2-3yx+2,25x^2=0$	
15. $3600-b^2=0,$		
16. $a^2-4900=0,$		
17. $12100-b^2=0,$		
18. $2,89-y^2=0;$		