

### Задача №1.

Изобразите на координатной плоскости декартовы произведения  $A \times B$ ,  $B \times A$ ,  $A \times A$ ,  $B \times B$  множеств  $A$  и  $B$ :

1.  $A = \{a \mid a \in [0;1)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } |b| \leq 2\}$ ;
2.  $A = \{1,2,3,4,5\}$ ;  $B = \{b \mid b \in [0;3]\}$ ;
3.  $A = \{a \mid a \in \mathbb{R} \text{ и } a^2 \leq 1\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b \in [3; +\infty)\}$ ;
4.  $A = \{-1,2,-3,4,-5\}$ ;  $B = \{-4,-2,0,2,4\}$ ;
5.  $A = \{a \mid a \in (0;3]\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } |b| \geq 1\}$ ;
6.  $A = \{a \mid a \in (-\infty;-3)\}$ ;  $B = \{1,2,3,6,7,8\}$ ;
7.  $A = \{a \mid a \in (-\infty;-1)\}$ ;  $B = \{b \mid b \in [3; +\infty)\}$ ;
8.  $A = \{1\}$ ;  $B = \{b \mid b \in (0;3)\}$ ;
9.  $A = \{a \mid a \in (-3; +\infty)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b^2 \leq 10\}$ ;
10.  $A = \{1,2,3,-1,-2,-3\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b^3 \leq 27\}$ ;
11.  $A = \{a \mid a \in (-\infty;5]\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } |b| \leq 3\}$ ;
12.  $A = \{a \mid a \in [-3; +\infty)\}$ ;  $B = \{0,1,-1,3,-3\}$ ;
13.  $A = \{a \mid a \in (2; +\infty)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b^3 \leq 8\}$ ;
14.  $A = \{a \mid a \in \mathbb{R} \text{ и } a^2 + 5a + 6 \leq 0\}$ ;  $B = \{-3,-2\}$ ;
15.  $A = \{a \mid a \in (-\infty;-3] \cup (1; +\infty)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } |b| < 1\}$ ;
16.  $A = \{-1,-2,-3,-4,-5\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b^3 > 27\}$ ;
17.  $A = \{a \mid a \in (-\infty;1) \cup (1; +\infty)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b^3 \leq -8\}$ ;
18.  $A = \{a \mid a \in \mathbb{R} \text{ и } a^2 - 3a - 4 = 0\}$ ;  $B = \{2\}$ ;
19.  $A = \{a \mid a \in (-2;-1] \cup [4; +\infty)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } |b| > 4\}$ ;
20.  $A = \{a \mid a \in (-\infty;-1,5)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } 5b + 1 \leq 16\}$ ;
21.  $A = \{a \mid a \in (-5;-1)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b^3 \geq 1\}$ ;
22.  $A = \{0,2,4,6\}$ ;  $B = \{1,3,5,7\}$ ;
23.  $A = \{a \mid a \in (-1;3]\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } |b| \leq 2\}$ ;
24.  $A = \{a \mid a \in \mathbb{R} \text{ и } a^2 - 5a + 6 > 0\}$ ;  $B = \{0,2,4,6\}$ ;
25.  $A = \{a \mid a \in (-\infty;-2] \cup [2; +\infty)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b^3 \geq -2\}$ ;
26.  $A = (-\infty; +\infty)$ ;  $B = \{b \mid b \in (0;3]\}$ ;
27.  $A = \{a \mid a \in (-\infty;-1) \cup [2; +\infty)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b \leq 2\}$ ;
28.  $A = \{a \mid a \in (-\infty;4)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b < 14\}$ ;
29.  $A = \{a \mid a \in (-\infty;-3) \cup (4;6]\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } 1 \leq b^3 < 8\}$ ;
30.  $A = \{a \mid a \in \mathbb{Z} \text{ и } -2 < a \leq 3\}$ ;  $B = (-\infty; +\infty)$ ;
31.  $A = \{a \mid a \in [-3;-1) \cup [1;3)\}$ ;  $B = \{b \mid b \in \mathbb{R} \text{ и } b > 2\}$ ;
32.  $A = \{a \mid a \in \mathbb{R} \text{ и } a^2 + 5a + 6 \geq 0\}$ ;  $B = \{b \mid b \in \mathbb{Z} \text{ и } b^2 + b - 2 = 0\}$ .