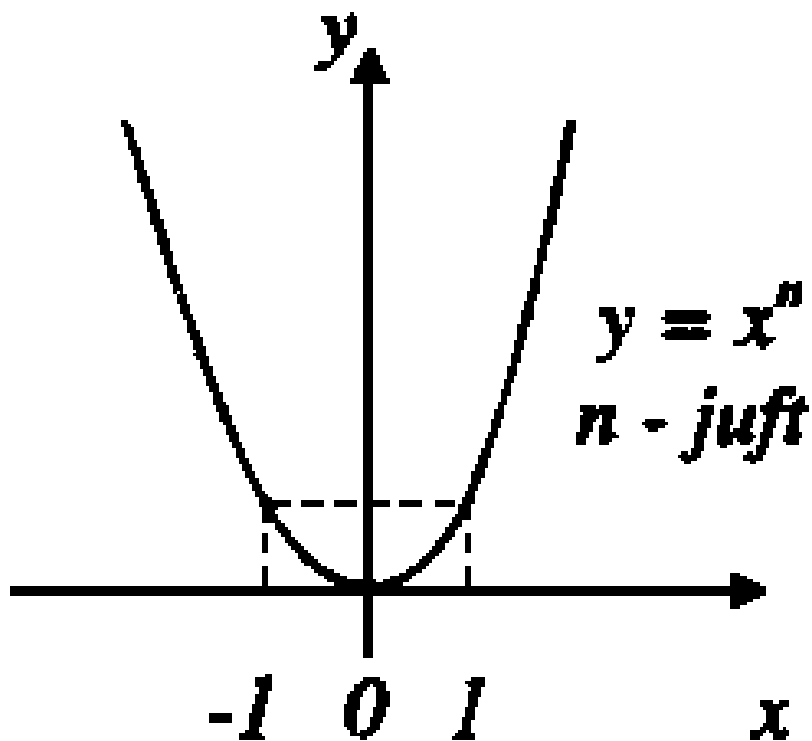
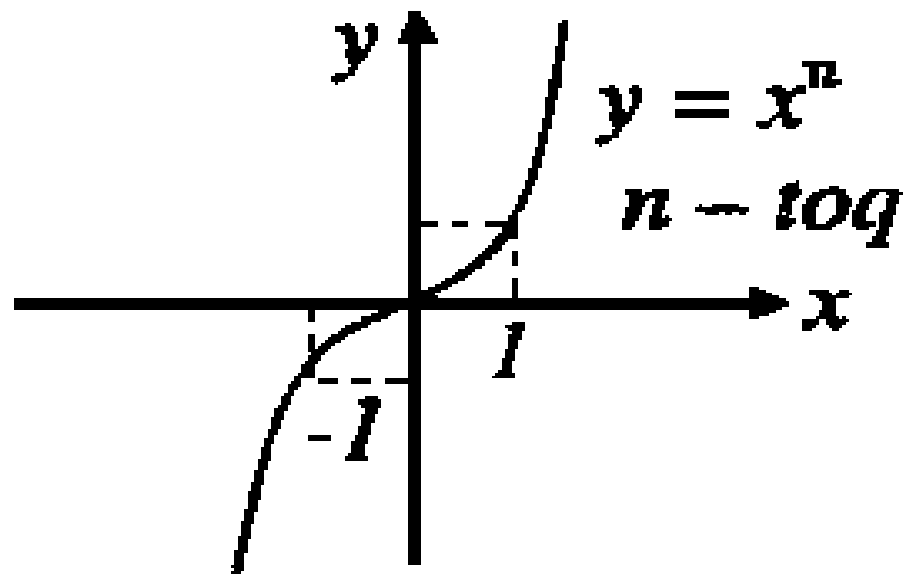


Mavzu: Darajali funksiya

$$y = x^n, \quad n \in N:$$

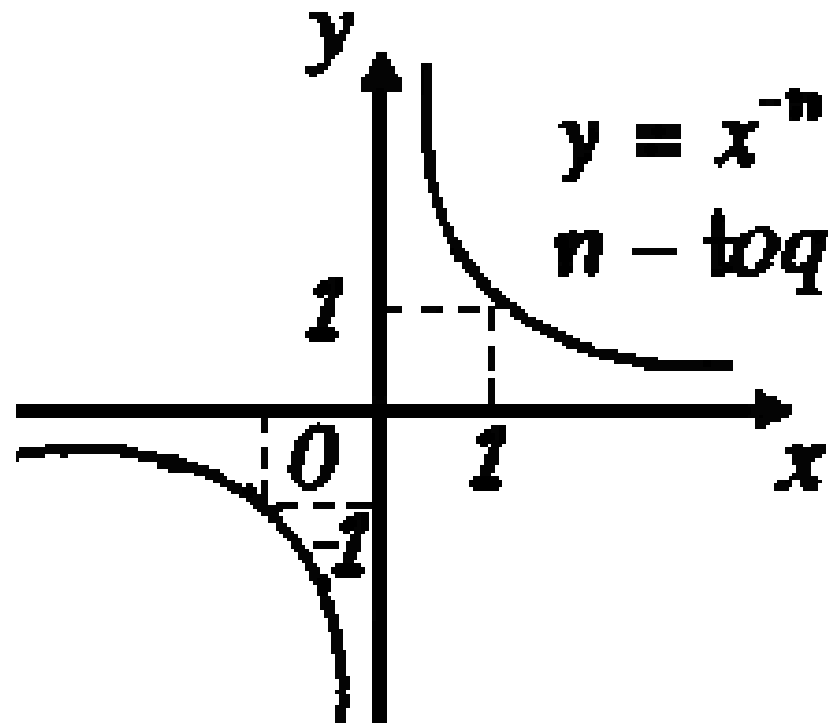
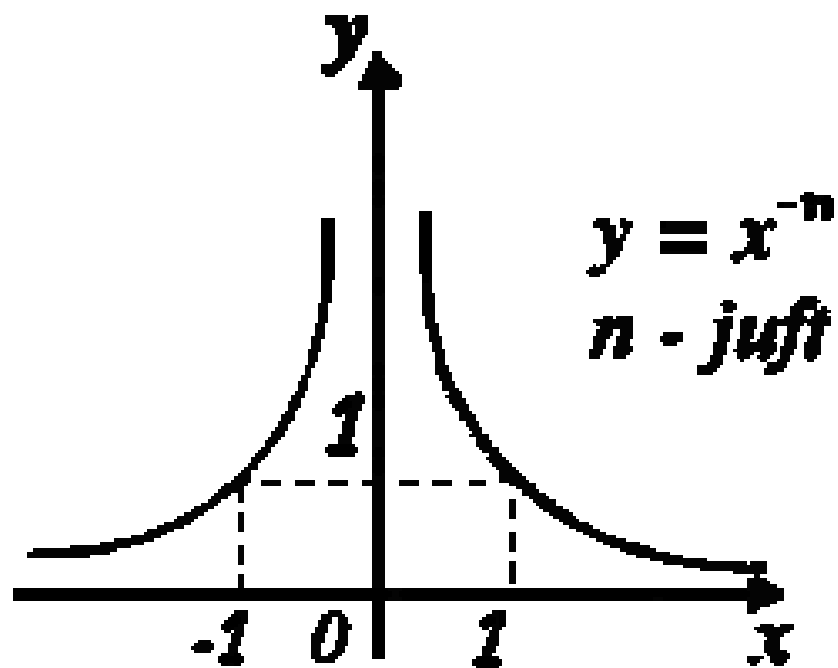


$$D(y) = (-\infty; \infty), E(y) = [0; +\infty)$$



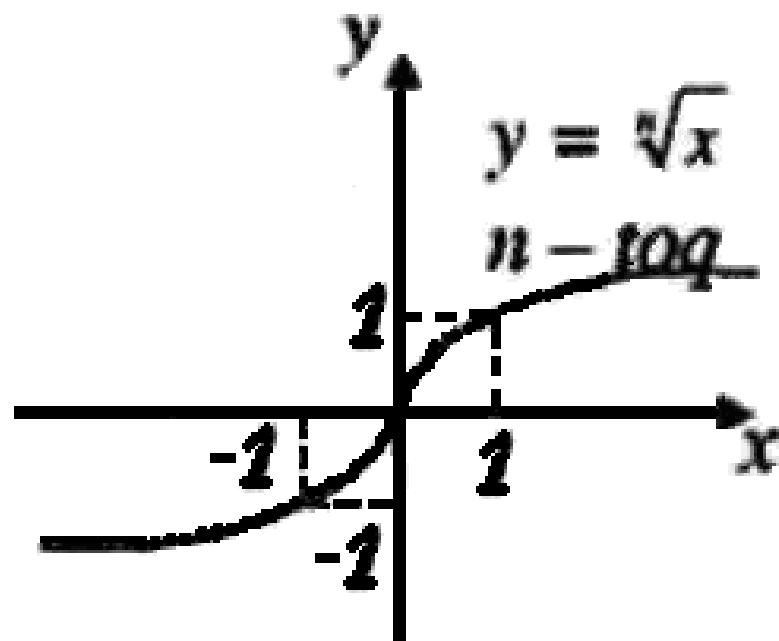
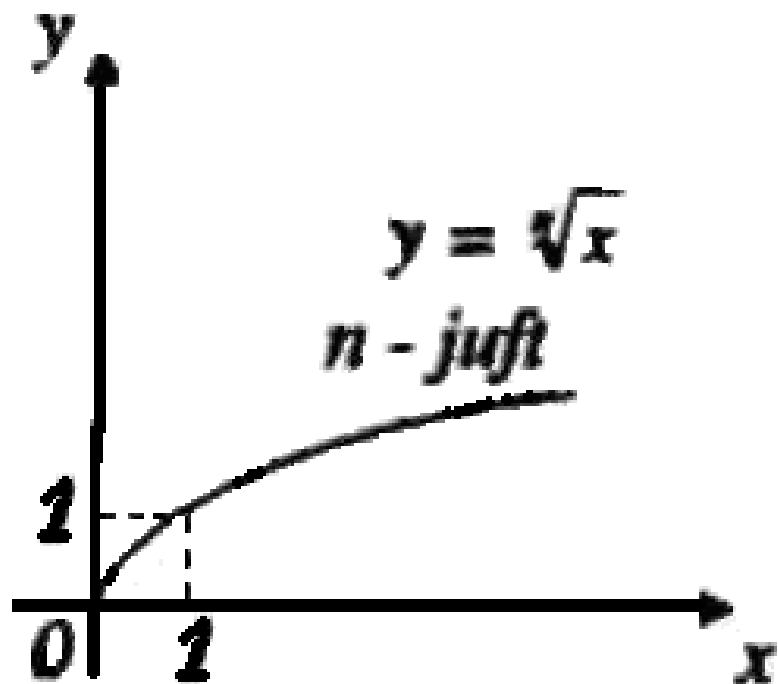
$$D(y) = E(y) = (-\infty; \infty)$$

$$y = x^{-n} = 1/x^n, \quad n \in \mathbb{N}:$$



$$D(y) = (-\infty; 0) \cup (0; +\infty), E(y) = (0; +\infty) \quad D(y) = E(y) = (-\infty; 0) \cup (0; +\infty)$$

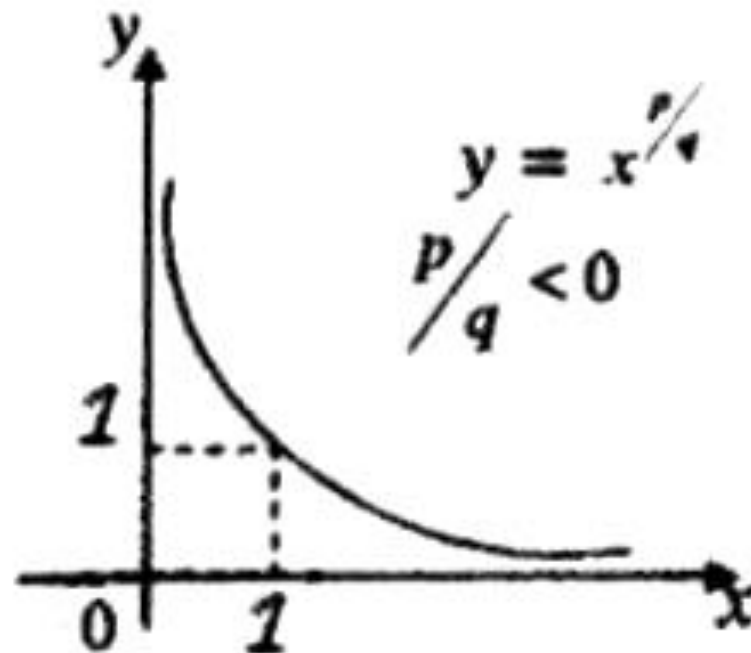
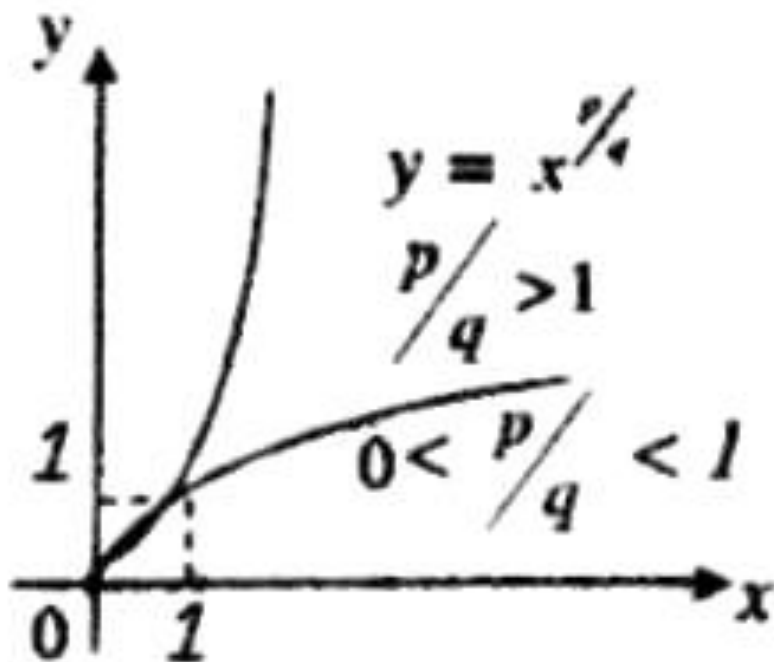
$$y = \sqrt[n]{x} \quad n \in N$$



$$D(y) = E(y) = (-\infty; \infty)$$

$$D(y) = E(y) = [0; +\infty)$$

$$y = x^{p/q} \quad p, q \in \mathbb{Z}, \quad q \neq 0$$



$$D(y) = E(y) = [0; +\infty)$$

$$D(y) = E(y) = (0; \infty)$$



Mashqlar

7.129. Funktsiyalar grafiklarining eskizlarini chizing:

a) $y = x^{1/5}$;

b) $y = x^{-1/5}$;

d) $y = x^5$;

e) $y = x^{-5}$;

f) $y = |x^{1/5}|$;

g) $y = (x - 1)^{1/5}$;

h) $y = (x + 1)^{1/5}$;

i) $y = |x - 1|^{1/3}$;

j) $y = |x - 1|^{1/3} + 1$;

k) $y = |81x - 243|^{1/4}$;

l) $y = (2x)^3$;

m) $y = (2x)^{1/3}$.

- 7.130.** $f(x) = \sqrt{x^4} - x$ ning $x = -2; -1; 0; 1; 2; 3; 4; -8; 8$ ga mos qiymatlarini toping va grafigini yasang.
- 7.131.** R radiusli doiraga ichki chizilgan teng yonli uchburchakning yuzini uning balandligining funksiyasi sifatida ifodalang.
- 7.132.** Yuza S ga teng bo'lgan uchburchak yuzini uning: 1) asosi uzunligining; 2) balandligi uzunligining funksiyasi sifatida ifodalang.
- 7.133.** Muntazam oltiburchak yuzini uning tomoni uzunligining funksiyasi sifatida ifodalang.