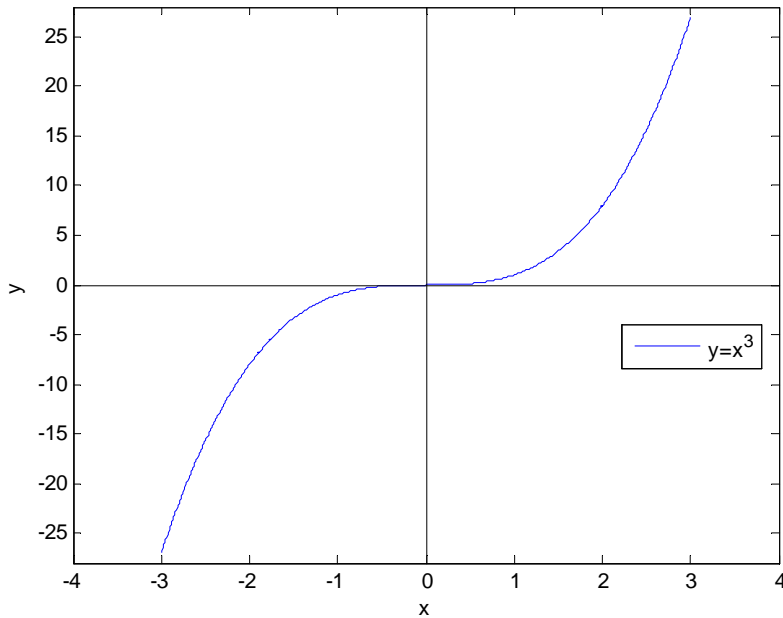
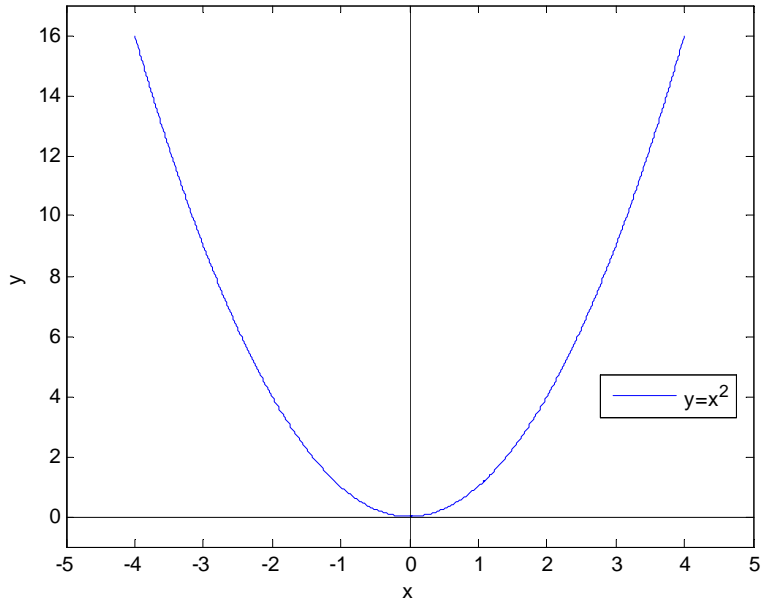
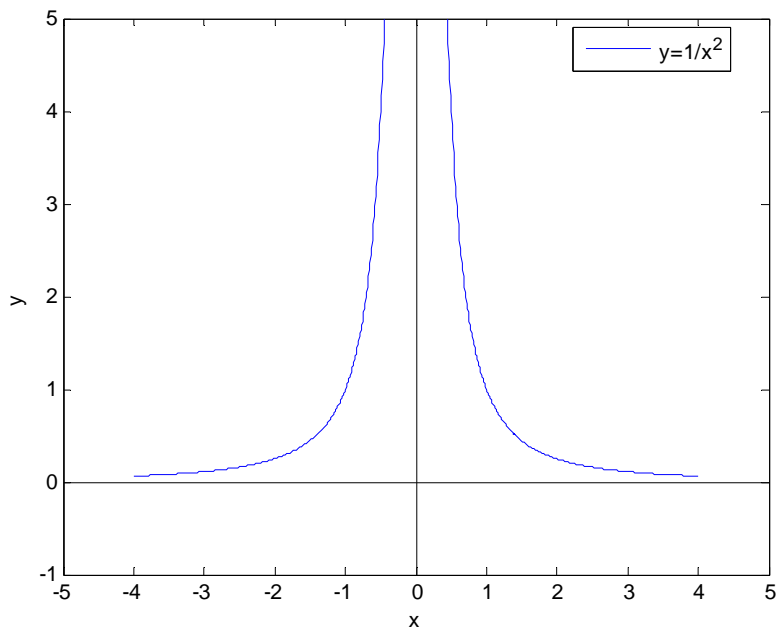
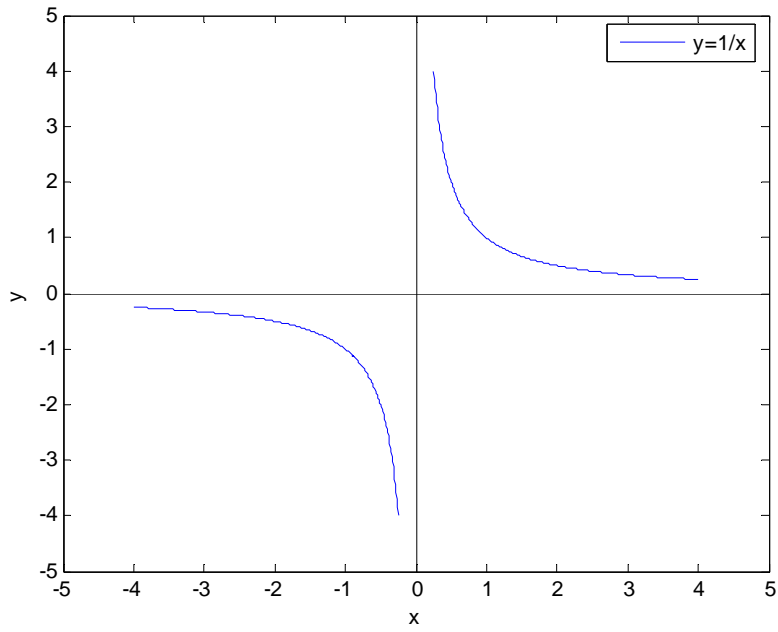


פונקציות אלמנטאריות.

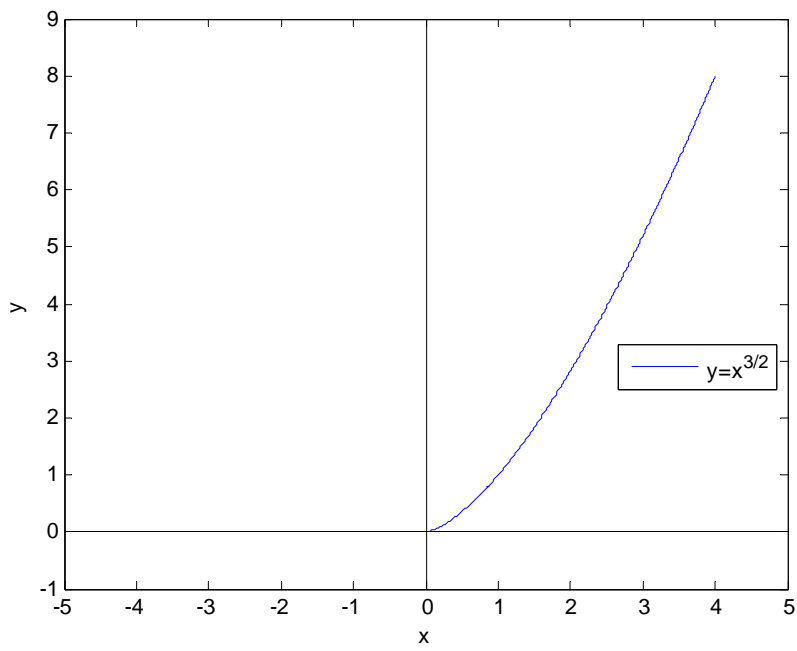
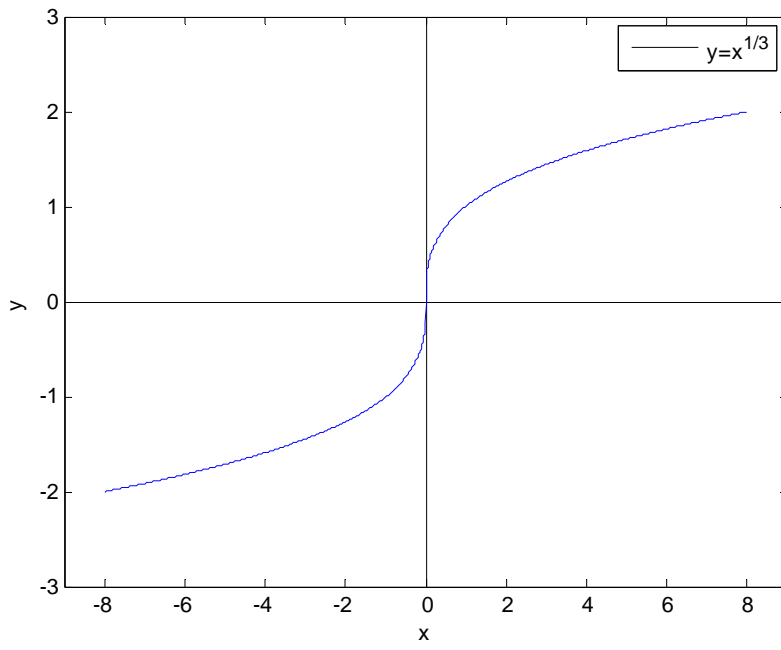
1. פונקציות חזקה  $y = x^\alpha$ , כאשר  $\alpha \in \mathbf{N}$ ,  $D(y) = \mathbf{R}$ ,  $E(y) = \mathbf{R}$ , כאשר  $\alpha$  אי-זוגי ו- $E(y) = [0, +\infty)$ , כאשר  $\alpha$  זוגי.

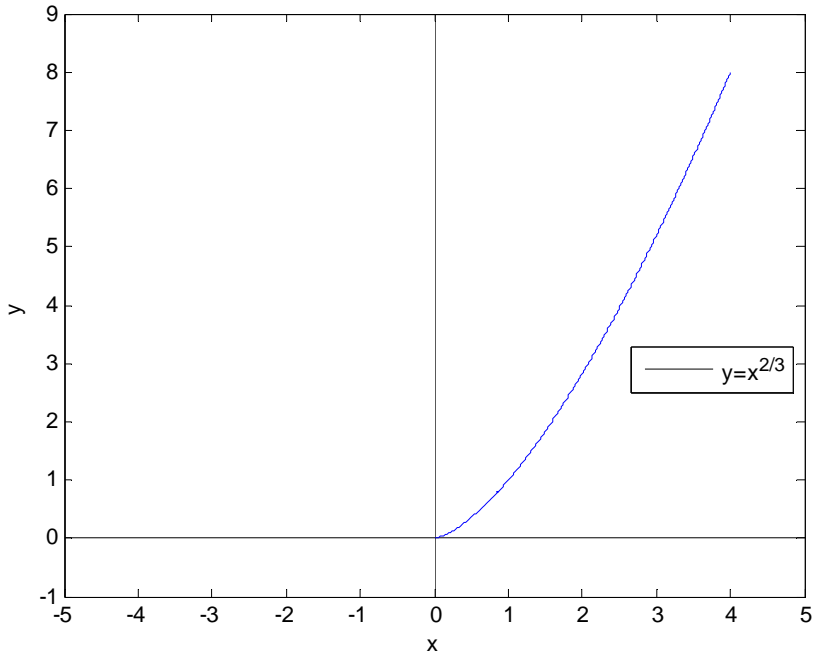


ב. כאשר  $\alpha < 0$ ,  $\alpha \in \mathbf{Z}$ ,  $D(y) = (-\infty, 0) \cup (0, +\infty)$ ,  $E(y) = (-\infty, 0) \cup (0, +\infty)$ , כאשר  $-\alpha$  אי-זוגי ו- $E(y) = (0, +\infty)$ , כאשר  $-\alpha$  זוגי.

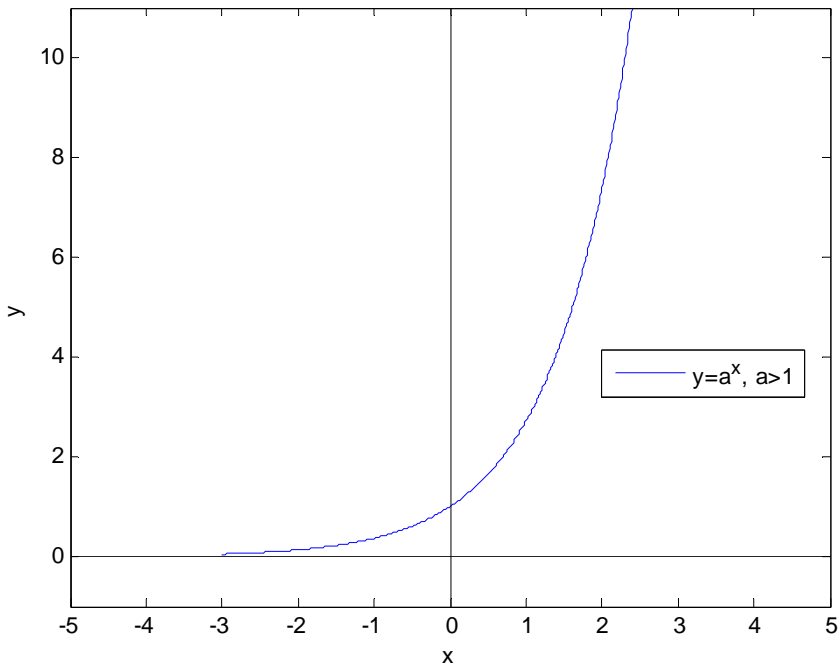


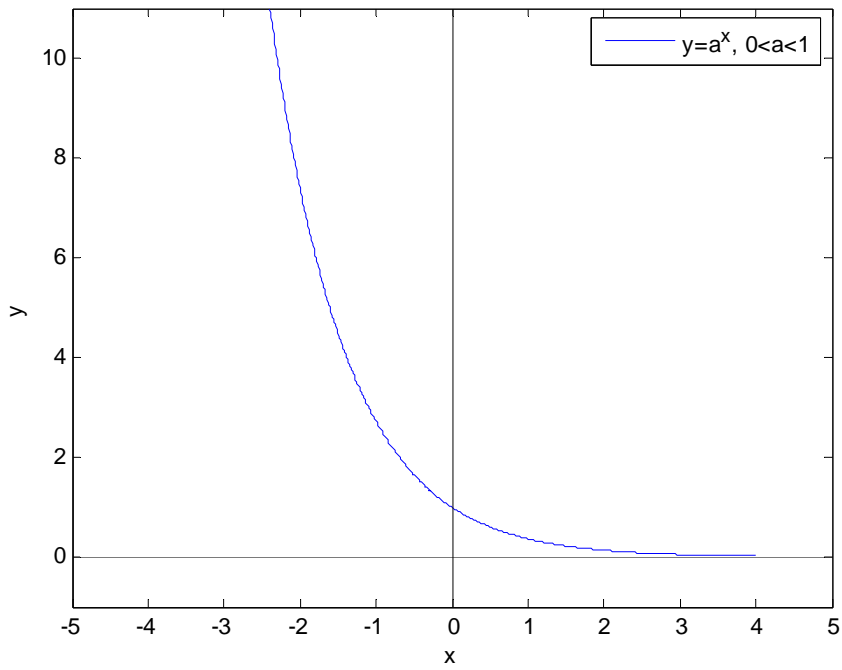
$E(y) = (0, +\infty)$ ,  $D(y) = (0, +\infty)$ ,  $\alpha \in \mathbf{Z} (\alpha \in \mathbf{R})$  . $\lambda$



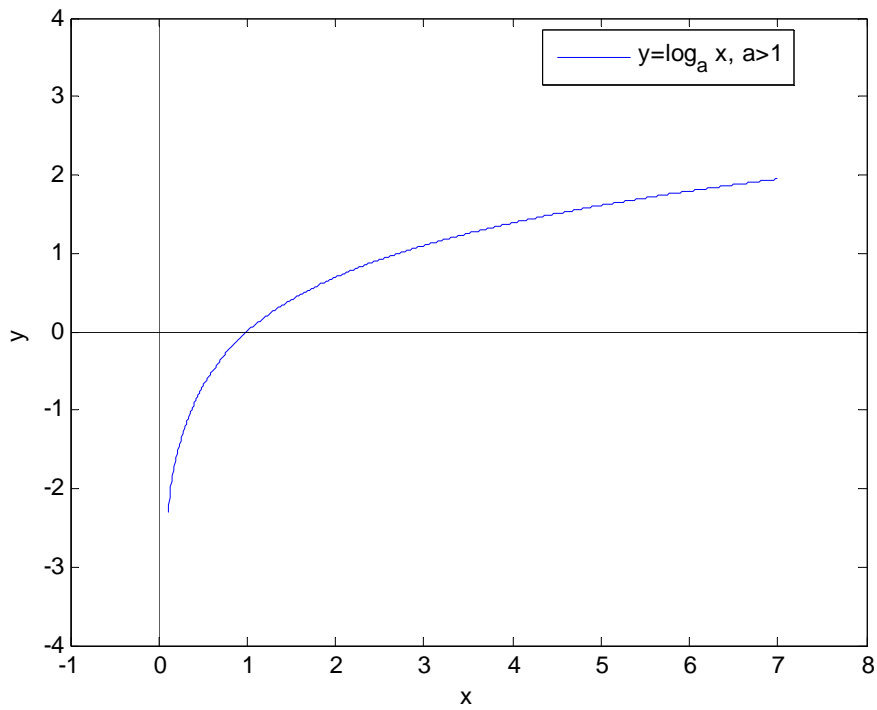


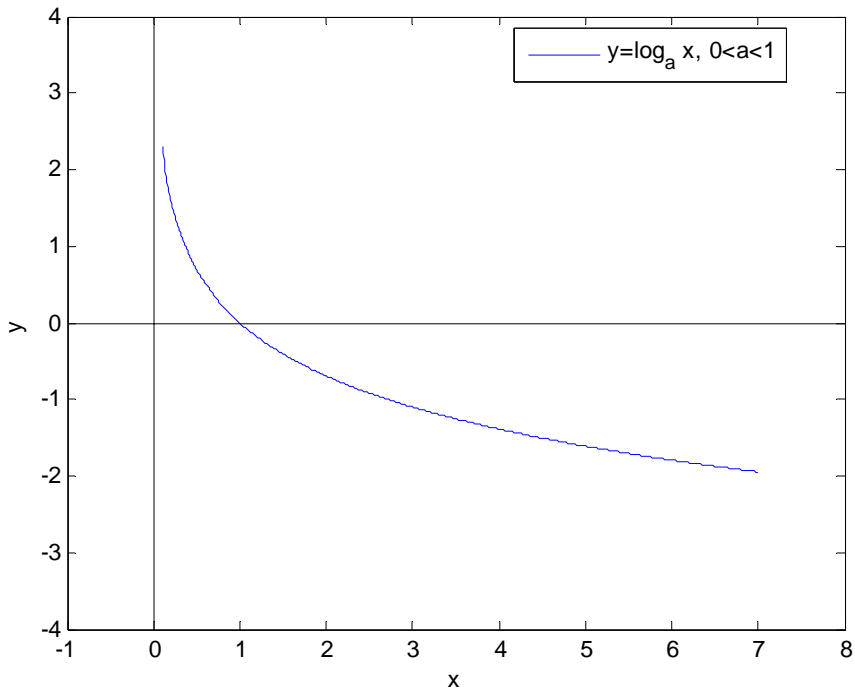
2. פונקציה מערכית.  $y = a^x, a > 0$ ,  $E(y) = (0, +\infty)$ ,  $D(y) = \mathbf{R}$ .



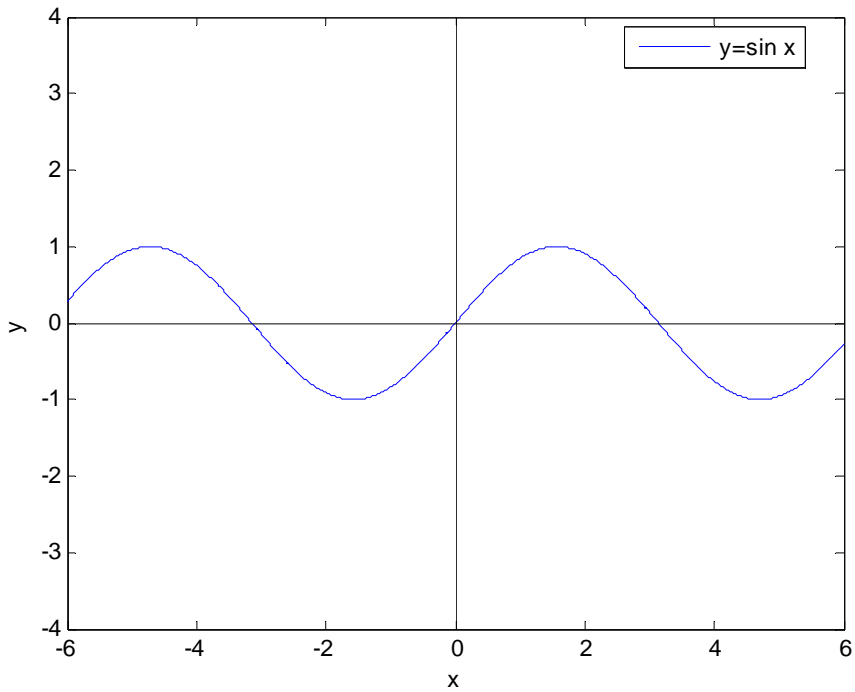


3. פונקציות לוגריתמיות.  $y = \log_a x, a > 0, a \neq 1$ .  $D(y) = (0, +\infty), E(y) = \mathbf{R}$ .

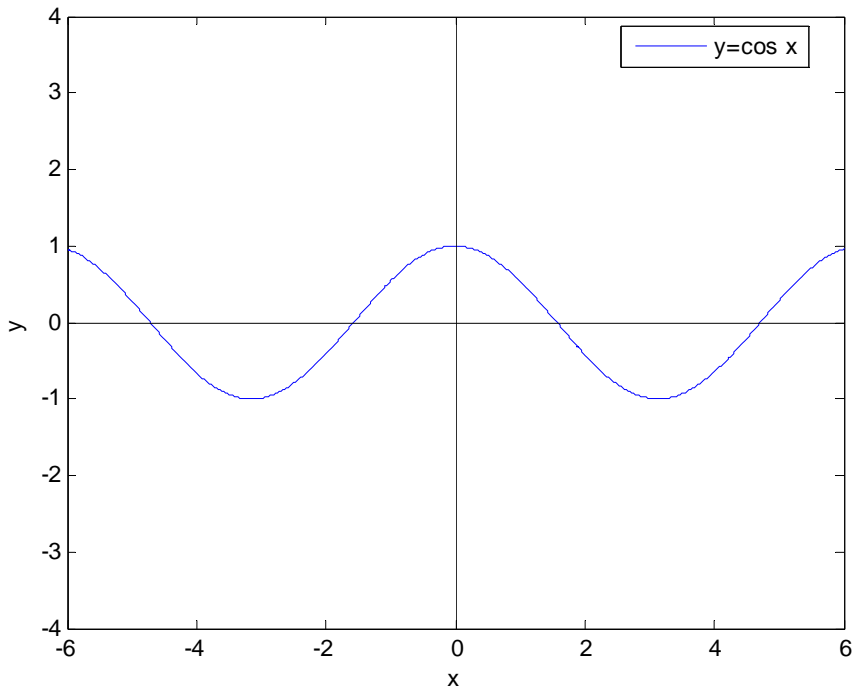




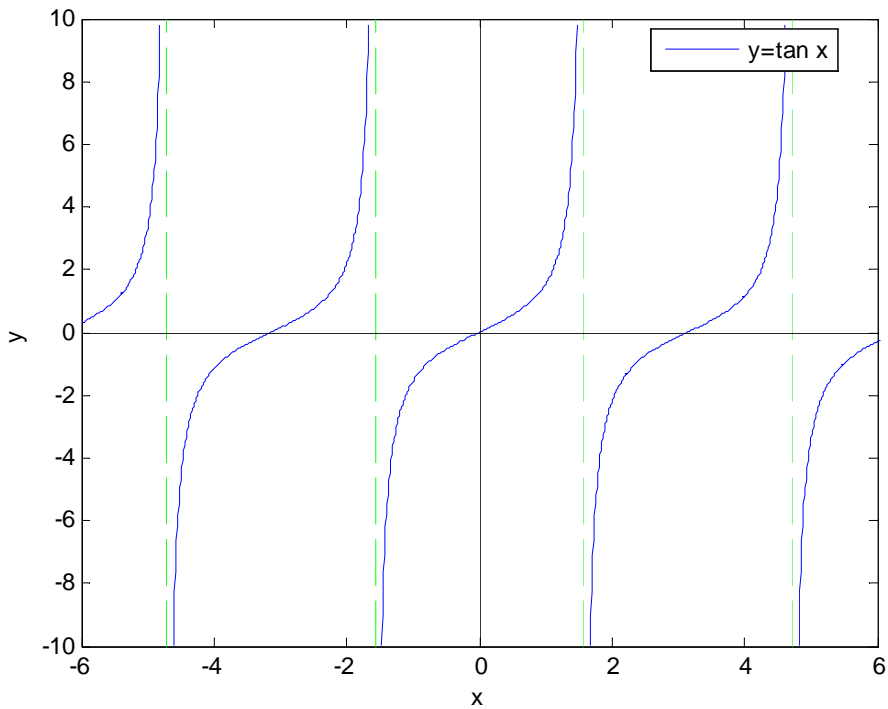
4. פונקציות טריגונומטריות.  
א.  $D(y) = \mathbf{R}, E(y) = [-1, 1], y = \sin x$ .



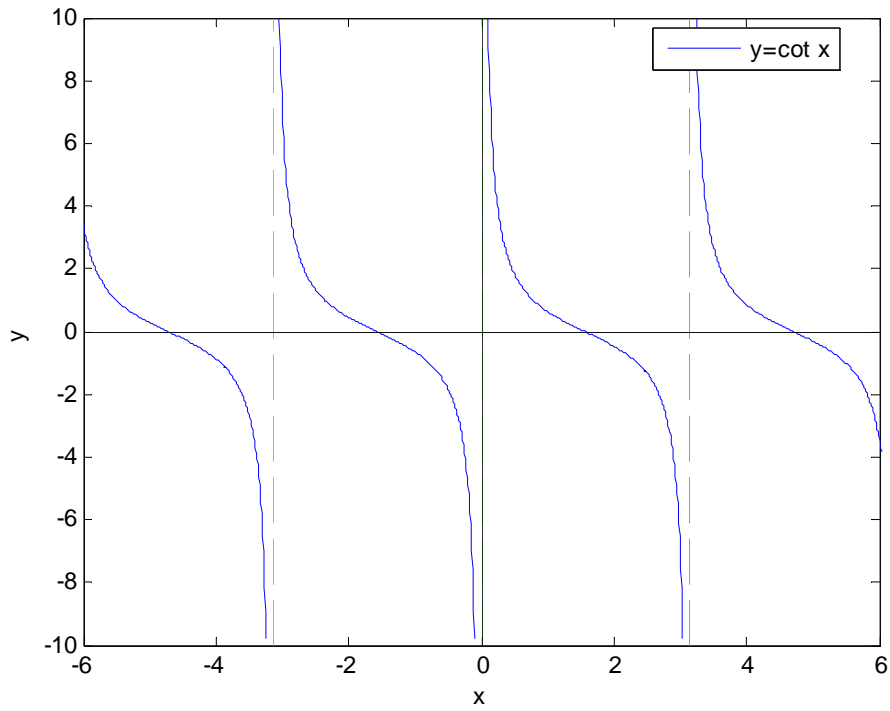
ב.  $D(y) = \mathbf{R}, E(y) = [-1, 1], y = \cos x$ .



$$. D(y) = \bigcup \left( -\frac{\pi}{2} + \pi k, \frac{\pi}{2} + \pi k \right), k \in \mathbf{Z}, E(y) = \mathbf{R}, y = \tan x .\lambda$$

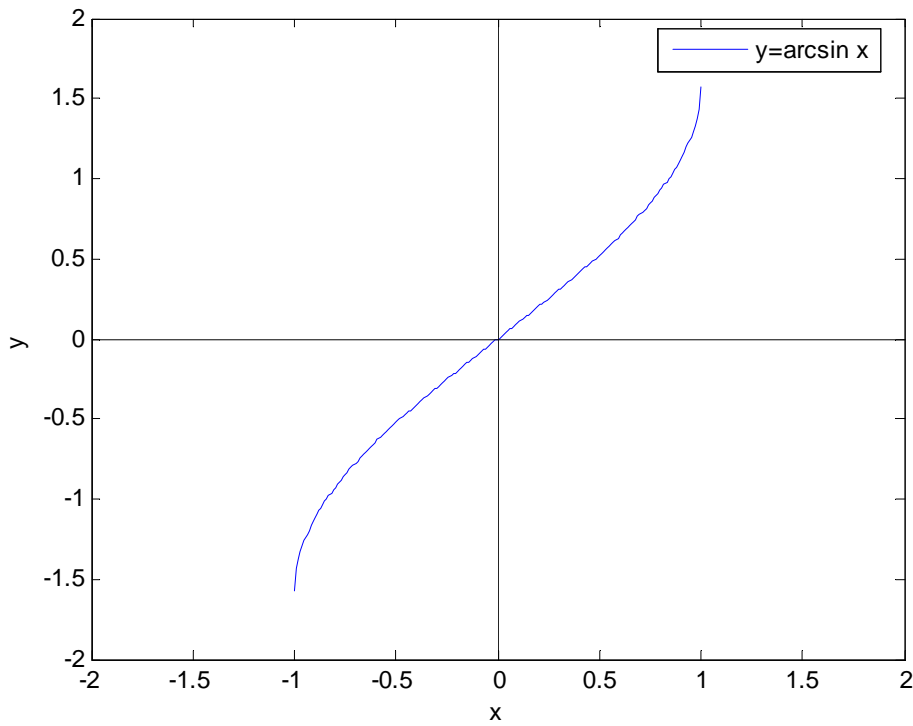


$$D(y) = \bigcup (\pi k, \pi + \pi k), k \in \mathbf{Z}, E(y) = \mathbf{R}, y = \cot x .\tau$$

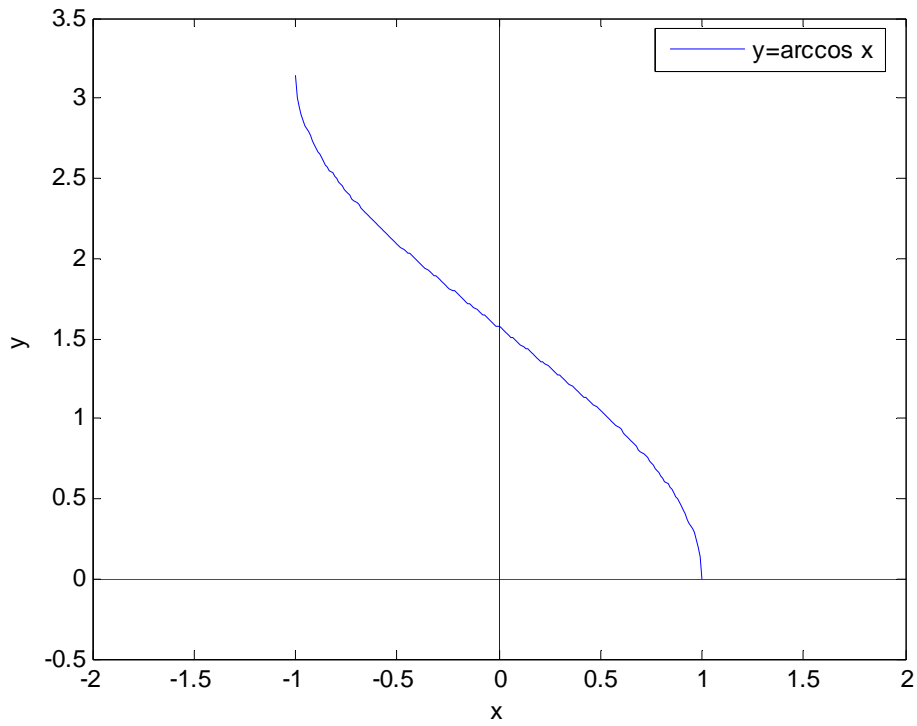


5. פונקציות טריגונומטריות הפוכות.

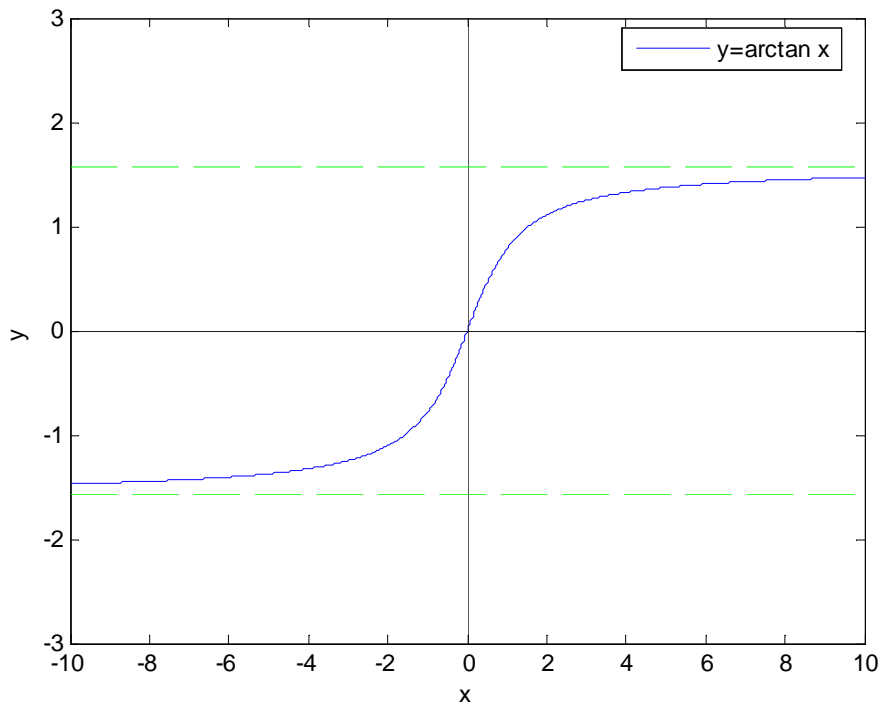
א.  $y = \arcsin x$ ,  $E(y) = \left[-\frac{\pi}{2}, \frac{\pi}{2}\right]$ ,  $D(y) = [-1, 1]$ .



$$. D(y) = [-1,1], E(y) = [0, \pi] , y = \arccos x .\text{a}$$



$$. D(y) = \mathbf{R}, E(y) = \left(-\frac{\pi}{2}, \frac{\pi}{2}\right) , y = \arctan x .\text{a}$$



$.D(y) = \mathbf{R}, E(y) = (0, \pi) , y = \text{arccot } x .7$

