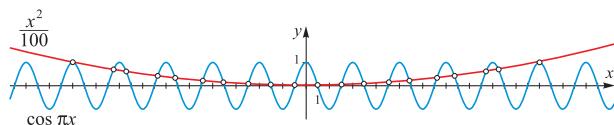


**Zadatak 21.** Koliko rješenja imaju jednadžbe:

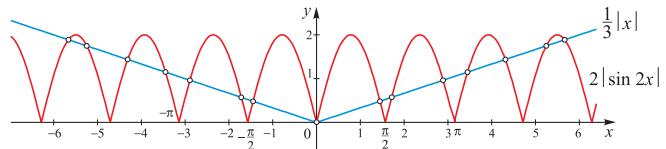
- 1)  $\cos \pi x = \frac{x^2}{100}$ ;
- 2)  $\frac{1}{3}|x| = 2|\sin 2x|$ ;
- 3)  $|\log_{\frac{1}{2}} x| = 2|\sin 2x|$ ;
- 4)  $|\log_{\frac{1}{2}} |x|| = |\sin \pi x|$ ;
- 5)  $\cos \pi x = -\frac{1}{4}|x|$ ;
- 6)  $2^{1-|x|} = \frac{1}{3}|4x^2 - 9|$ ;
- 7)  $||x| - 1| = 2^{|x|}$ ;
- 8)  $\log_2 \frac{|x|}{4} = \sin \pi|x|$ ;
- 9)  $2^{1-|x|} = |2 - |x||$ ;
- 10)  $2^{-\operatorname{sgn} x} = \cos \frac{x}{2}$ ?

**Rješenje.**

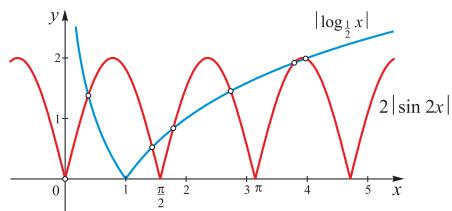
1) 20;



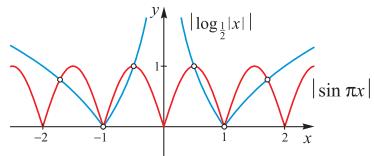
2) 15;



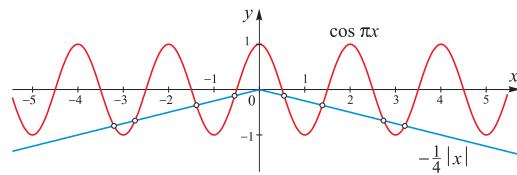
3) 6;



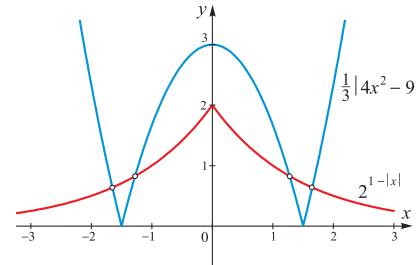
4) 6;



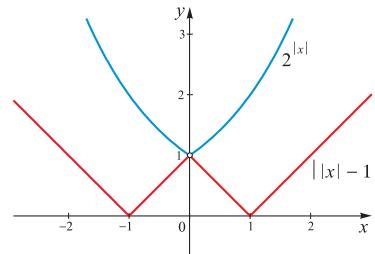
5) 8;



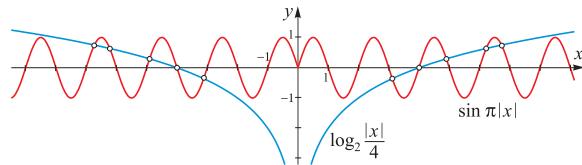
6) 4;



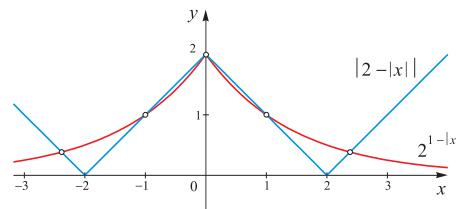
7) 1;



8) 10;



9) 5;



10) beskonačno.

