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Egészrész / törtrész

1. $[x]+[y]\le[x+y]\le[x]+[y]+1$
2. $\left[\frac{[x]}{n}\right]=\left[\frac{x}{n}\right] \qquad n\in N^+$
3. $[9x]=9; \qquad [x+3]=3+[x]$
4. $\left[x-\frac{1}{2}\right]+\left[x+\frac{1}{2}\right]=[2x]$
5. $[x]+\left[x+\frac{1}{2}\right]=[2x]$
6. $2[x]=[2x]; \qquad [x]+x=[2x]$
7. $[2x]=[x]-1; \qquad [2x]=x-1$
8. $2^{[x]}=2x+1; \qquad \left[2^x\right]=2x+1$
9. $3^{[x]}=3x+1; \qquad \left[3^x\right]=3x+1$
10. $[x]+[2x]+[3x]=[6x]$
11. $\left[\frac{[x]+[2x]+[3x]}{6}\right]=x$
12. $x-1=\left[\frac{x}{2}\right]+\left[\frac{x}{3}\right]+\left[\frac{x}{6}\right]$
13. $8^{\left[\frac{4x+1}{5}\right]}=2^{7x-1}$
14. $8^{\left[\frac{4x+1}{3}\right]}=2^{2x-1}$
15. $\left[\frac{6x+5}{8}\right]=\frac{15x-7}{5}$
16. $[x-1]=\left[\frac{x+2}{2}\right]$
17. $\left[x^3\right]+\left[x^2\right]+[x]=\{x\}-1; \qquad \left[x^2\right]=[x]^2$
18. $[x]=1+\left\{x^2-1\right\}$
19. $x^3-[x]=3$
20. $2^x-2=[[x]-x]$
21. $\left[x-\frac{1}{2}\right]+\left[x+\frac{1}{2}\right]=[3x]$
22. $2[x]=5\{x+2\} \qquad 2\{x\}=5[x+2]$
23. $[2x]=2[x]-1; \qquad [2x]=3x-1$
24. $x^2-[x]=6\{x\} \qquad \left[x^2\right]-x=6\{x\}$
25. $3^{[x]}=3x+1; \qquad \left[3^x\right]=3x+1$
26. $x-1=\left[\frac{x}{2}\right]+\left[\frac{x}{3}\right]+\left[\frac{x}{4}\right]$
27. $\left[\frac{5x+3}{6}\right]=\frac{6x-1}{5}$
28. $[x-2]=\left[\frac{x+2}{3}\right]$
29. $\left[x^4\right]-2\left[x^2\right]=\{x\}-1$
30. $\frac{[x]}{\{x\}}=2008$