4. Izračunati: $2^{20}-\sqrt{\left(1+2^{11}+2^{20}\right)\cdot\left(1-2^{11}+2^{20}\right)}$. (školsko 2003)

$$2^{20}-\sqrt{\left(1+2^{11}+2^{20}\right)\cdot\left(1-2^{11}+2^{20}\right)}=$$

$$2^{20}-\sqrt{\left(1+2^{10}\right)^2\left(1-2^{10}\right)^2}=$$

$$2^{20}-\sqrt{\left(1+2^{10}\right)^2}\cdot\sqrt{\left(1-2^{10}\right)^2}=$$

$$2^{20}-\left|1+2^{10}\right|\cdot\left|1-2^{10}\right|=$$

$$2^{20}-\left(2^{10}+1\right)\cdot\left(2^{10}-1\right)=$$

$$2^{20}-\left(2^{20}-1\right)=1$$

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