

1414

$$3^{20} > 32^x$$

$$3^{5 \cdot 4} > (2^5)^x$$

$$(3^4)^5 > (2^x)^5$$

$$(a^x)^y = a^{x \cdot y} = a^{y \cdot x} = (a^y)^x$$

Denna olikhet kan bara gälla om

$$3^4 > 2^x$$

$$81 > 2^x$$

alltså

$$x \leq 6$$

$$\begin{aligned} 2^3 &= 8 \\ 2^4 &= 16 \\ 2^5 &= 32 \\ 2^6 &= 64 \\ 2^7 &= 128 \end{aligned}$$

Svar: 6