Exponent laws

Things you need to learn

- Index laws for integer exponents.

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- $a^0 = 1$, provided that $a \neq 0$.

Przykład 1

Oblicz:

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$$(10^6 \div 5^6)^4 \div (16^5 \div 4^5)^2 = (2^6)^4 \div (4^5)^2 = 2^{24} \div 4^{10} = 2^{24} \div (2^2)^{10} = 2^4 = 16$$

Przykłady 2

Przedstaw poniższe wyrażenie w postaci potęgi o podstawie x ($x \neq 0$)

$$\frac{(x^2)^7 \div (x^5 \div x^3)^4}{(x^6 \div x^2) \times (x^9 \div x^4)}$$

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$$\frac{(x^3)^7 \div (x^5 \div x^3)^4}{(x^6 \div x^2) \times (x^9 \div x^4)} = \frac{x^{21} \div (x^2)^4}{x^4 \times x^5} = \frac{x^{21} \div x^8}{x^4 \times x^5} = \frac{x^{13}}{x^9} = x^4$$

Na wejściówkę trzeba umieć zastosować powyższe zasady działania na potęgach do obliczenie złożonych wyrażeń.

W razie jakichkolwiek pytań, proszę pisać na T.J.Lechowski@gmail.com.