EXPONENTS : Laws of exponents

Write 27×9^x as a power of 3 in terms of x

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Simplify :

$25 \times 5^3 \times 5^6$

Give your answer as power of 5

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Work Out :

$[(2^3 \times 3^8) / 3^2]^{1/3}$

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Work Out :

$(50a^5 / 2a^3)^{1/2}$

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Work Out :

(i) $(2xy^3)^4$ (ii) $(2m^4)^3$

Work Out :

$3^{16} \div (3^2)^7$

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Work Out :

(i) $10m^5n^4 / 2m^2n$

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Work Out :

$2a^3c^3 \times 3a^2c$

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Work Out :

(ii) $(5^{-3} \times 5^7)^3$

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Work Out :

$$\frac{2^9 \times 2^{-2}}{2^3}$$

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Work Out :

(iii) $(4^{-2}) \times (4^{1/3})^3$

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Work Out :

$(16^{1.5}) + 8^0$

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Work Out :

(iv) $(2^{-3}) \times (125^{1/3})$

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Work Out :

$(25^{1/2}) \div 2^{-2}$

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Work Out :

(v) $(32^{-0.4}) \times (16/25^{1})$

Work Out :

$(25^{1/2}) \div 2^{-2}$

Work Out :

$(4^{-1} \div 3^{-1})^{-2}$

By what number should $(\frac{3}{5})^{-2}$ be multiplied so that the product is $(\frac{9}{125})^{-1}$

Work Out :

$$\frac{(3^2)^3 \times (-7)^2}{(7^2)^2 \times 81}$$

Work Out :

$$\frac{(2^{-3})^2 \times (3^{-1})^6 \times (5^{-2})^4}{(2^{-5})^2 \times (3^6)^{-1} \times (5^{-2})^3}$$

Work Out :

$$\frac{a^{\frac{1}{5}} \times a^{\frac{2}{3}}}{a^{\frac{3}{5}}}$$

Find the value of x , when

$$3^{-5} \times 3^{2x+1} = 3^{14} \div 3^{6}$$