

a Write $4^5 \times 4^3 \div 4^6$ as a single power 4^2 multiply and divide in one	b Write $3^2 \div 3^5$ as a single power 3^{-3} a negative index from dividing	c Work out 10^{-2} as a decimal 0.01 a negative power of ten	d Work out $(\frac{2}{5})^{-1}$ $\frac{5}{2}$ a fraction to the power -1
e Work out 3×2^{-2} $\frac{3}{4}$ a number times a negative power	f Work out $(\frac{2}{3})^{-2}$ $\frac{9}{4}$ a fraction to a negative power	g Work out $81^{\frac{1}{4}}$ 3 a fourth root	h Work out $4^{\frac{3}{2}}$ 8 an index bigger than 1
i Work out $(\frac{4}{9})^{\frac{1}{2}}$ $\frac{2}{3}$ a fraction to a fractional power	j Solve $3^x = 81$ $x = 4$ an unknown index	k Solve $2^x = \frac{1}{8}$ $x = -3$ an unknown negative index	l Write 9^4 as a power of 3 3^8 changing the base

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