

Indices Rules - Brackets

Name:	Class:	Date:
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Mark	/ 10	%
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1) Evaluate the following. Where appropriate, leave your answer as a fraction. [5]

a) $(4^3)^2$

b) $(2^3)^2$

c) $(4^{-2})^{-1}$

d) $(2^4 \div 2^{-2})^0$

e) $\left(\frac{4^{-1}}{4^{-3}}\right)^2$

2) Simplify, giving your answer in index form [5]

a) $(6^2)^5$

b) $(3^3)^{-2}$

c) $(2^{-3} \times 2^{-3})^3$

d) $(5^{-1} \div 5^3)^{-1}$

e) $\left(\frac{7^{-3}}{7^{-1}}\right)^{-2}$

Solutions for the assessment Indices Rules - Brackets

1) a) 4096

b) 64

c) 16

d) 1

e) 256

2) a) 6^{10}

b) 3^{-6} or $\frac{1}{3^6}$

c) 2^{-18} or $\frac{1}{2^{18}}$

d) 5^4

e) 7^4