

Indices - Addition Rule

Name:	Class:	Date:
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1) Evaluate the following. Where appropriate, leave your answer as a fraction. [6]

a) $10^3 \times 10^2$

b) $10^4 \times 10^{-1}$

c) $3^{-4} \times 3^4$

d) $5^{-4} \times 5^2$

e) 10×10^0

f) $5^5 \times -5^{-6}$

2) Simplify, giving your answer in index form [6]

a) $7^5 \times 7^5$

b) $2^5 \times 2^{-3}$

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

d) $2^{-2} \times 2^{-4}$

e) $2^{-3} \times 2$

f) $-7^6 \times -7^3$

Solutions for the assessment Indices - Addition Rule

1) a) 100000

b) 1000

c) 1

d) $\frac{1}{25}$

e) 10

f) $-\frac{1}{5}$

2) a) 7^{10}

b) 2^2

c) 1 or 2^0

d) 2^{-6} or $\frac{1}{2^6}$

e) 2^{-2} or $\frac{1}{2^2}$

f) 7^9