Indices - Subtraction Rule

Name: Class: Date:

Mark	/ 12	%

1) Evaluate the following. Where appropriate, leave your answer as a fraction. [4]

    a) $4^4 \div 4^3$

    b) $\dfrac{2^6}{2^5}$

    c) $4^2 \div 4^{-3}$

    d) $\dfrac{3^4}{3^{-1}}$

2) Simplify, giving your answer in index form [8]

    a) $6^6 \div 6^2$

    b) $\dfrac{5^5}{5^3}$

    c) $3^4 \div 3^5$

    d) $5^{-2} \div 5^{-3}$

    e) $2^{-4} \div 2^{-3}$

    f) $\dfrac{5^2}{5^4}$

    g) $\dfrac{6^{-3}}{6^{-6}}$

    h) $\dfrac{5^{-4}}{5^{-3}}$

Solutions for the assessment Indices - Subtraction Rule

1) a) 4

b) 2

c) 1024

d) 243

2) a) 6^4

b) 5^2

c) 3^{-1} or $\frac{1}{3}$

d) 5 or 5^1

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

f) 5^{-2} or $\frac{1}{5^2}$

g) 6^3

h) 5^{-1} or $\frac{1}{5}$