Indices Rules - Fractional Index

Name:	Class:	Date:	

Mark	/ 10	%

1) Evaluate [4]

    a) $64^{\frac{1}{2}}$

    b) $27^{\frac{1}{3}}$

    c) $8^{\frac{2}{3}}$

    d) $25^{\frac{3}{2}}$

2) Evaluate, giving your answer as an integer or simplified fraction [1]

    $125^{-\frac{4}{3}}$

3) Give the following expression in index form [5]

    a) $\sqrt{6}$

    b) $\sqrt[3]{5}$

    c) $\sqrt[6]{6}$

    d) $(\sqrt{7})^3$

    e) $\frac{1}{\sqrt[3]{5}}$

Solutions for the assessment Indices Rules - Fractional Index

1) a) 8

b) 3

c) 4

d) 125

2) $\dfrac{1}{625}$

3) a) $6^{\frac{1}{2}}$

b) $5^{\frac{1}{3}}$

c) $6^{\frac{1}{6}}$

d) $7^{\frac{3}{2}}$

e) $\dfrac{1}{5^{\frac{1}{3}}}$ or $5^{-\frac{1}{3}}$